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# Marsala's Hinterland: The Evolution of Roman Settlement in Western Sicily

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# Marsala's Hinterland: The Evolution of Roman Settlement in Western Sicily

## **Abstract**

This thesis comprises a study of the evolution of human settlement in the hinterland of Marsala, in western Sicily, during the island's period of Roman control. The years between the third century BCE–eighth century CE were a period of frequent and significant change. Paradoxically, they are also a period during which Sicily is comparatively little known. A variety of factors have conspired to minimize scholarly attention on Roman Sicily, and as such, the ways in which the island responded to events in the wider Roman Mediterranean. Among the aims of the Marsala Hinterland Survey—an archaeological survey project active between 2007–2010—was to redress this imbalance. On the basis of ceramic materials collected during surface survey, and analyzed using Geographical Information Systems software, I reconstruct the history of settlement in the area of the survey's activity. This history, I go on to demonstrate, is characterized by an impressive degree of continuity, both in respect of the location and distribution of settlement. I locate the reasons for this continuity, and the moments of its occasional rupture, in the changing relationship between native Sicilian and Roman interests, especially as they relate to the production and shipment of grain throughout the Roman empire.

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OF ROMAN SETTLEMENT IN WESTERN SICILY

Emerson Avery

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in

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Sarah, for everything.

## ABSTRACT

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Emerson Avery

C. Brian Rose

This thesis comprises a study of the evolution of human settlement in the hinterland of Marsala, in western Sicily, during the island's period of Roman control. The years between the third century BCE–eighth century CE were a period of frequent and significant change. Paradoxically, they are also a period during which Sicily is comparatively little known. A variety of factors have conspired to minimize scholarly attention on Roman Sicily, and as such, the ways in which the island responded to events in the wider Roman Mediterranean. Among the aims of the Marsala Hinterland Survey—an archaeological survey project active between 2007–2010—was to redress this imbalance. On the basis of ceramic materials collected during surface survey, and analyzed using Geographical Information Systems software, I reconstruct the history of settlement in the area of the survey's activity. This history, I go on to demonstrate, is characterized by an impressive degree of continuity, both in respect of the location and distribution of settlement. I locate the reasons for this continuity, and the moments of its occasional rupture, in the

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## CHAPTER 1. INTRODUCTION

## I. Preamble.

The work presented in this thesis comprises a study of human settlement, and, more broadly, occupation in the hinterland of Roman Marsala, which lies in the province of Trapani in the westernmost part of Sicily. It is the result of my participation in the Marsala Hinterland Survey (MHS), the project of which is to characterize the evolution, from earliest times to present, of the landscape to which its name makes reference. It addresses the history of an area which witnessed the interaction of an impressive succession of cultures, among them Elymians; Phoenicians; Greeks; Romans; and Muslims. The remit of this thesis, meanwhile, is less expansive. In the pages that follow, I am concerned with developments between the third century BCE–eighth century CE (and most deeply, with those occurring after the change to the common era). Broadly speaking, this is the period during which the area under study (when not to say Sicily as a whole) was under the rule of Rome: either of the empire centered on that city or its eastern counterpart at Constantinople.

Notwithstanding the continuity implied by so long-lived a rule, it was also a period of frequent and significant change. Sicily's incorporation into the Roman *oikoumene*<sup>1</sup> exposed it (sometimes at very little remove!) to many of the developments affecting the world of which it had become a part. This is not the place to recount all these developments, a consideration of which, in great if by no means exhaustive detail, appears elsewhere in this thesis.<sup>2</sup> Here, suffice to say that it was a busy period of history.

Paradoxically, it is also a period we know relatively little about, at least insofar as Sicily is concerned. Despite its position at the center of the Roman Mediterranean, the island has long been at the margins of Roman history. With scant exceptions, we are notably ill-informed regarding the ways in which Sicily was affected by pan- and/or regional Roman events. The aim of this paper is to help redress that imbalance. To that end, it does not merely seek to discover *what happened* in the area under study; it also asks how, and in what ways, local developments reflected Roman trends.

Needless to say, these are pretty broad sorts of questions. As formulated in this thesis, however, they take a more specific form. Briefly put, the analysis developed herein is a fairly traditional—which is to say, socio-economic—settlement history. In some measure, this is a result of decisions on my part. Notwithstanding their familiarity, the questions of where people were living; how; and to whom they answered are not simply relevant, they are basic. But it is also a function of the evidence. The data on which this research is founded are not equally informative concerning every aspect of local history—there is precious little, in the pages to

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1. A term I use advisedly; discussion, see Chapter 2, Section II.2.2.1.

2. Specifically, in Chapter 2. For a summary of the contents of this and other chapters, see Section III, below.

come, regarding Sicily's religious panoply—but they do speak to questions of power, whether social, economic, or most typically both.

## II. The Marsala Hinterland Survey.

### 1. The study area.

In order to understand why this is so, it is useful to know where the data come from. The Marsala Hinterland Survey (MHS) is an intensive survey in the Mediterranean archaeological tradition which ran for four seasons between 2007–2010.<sup>3</sup> The project was directed by Drs. Robert Schon and Emma Blake (both Univer-

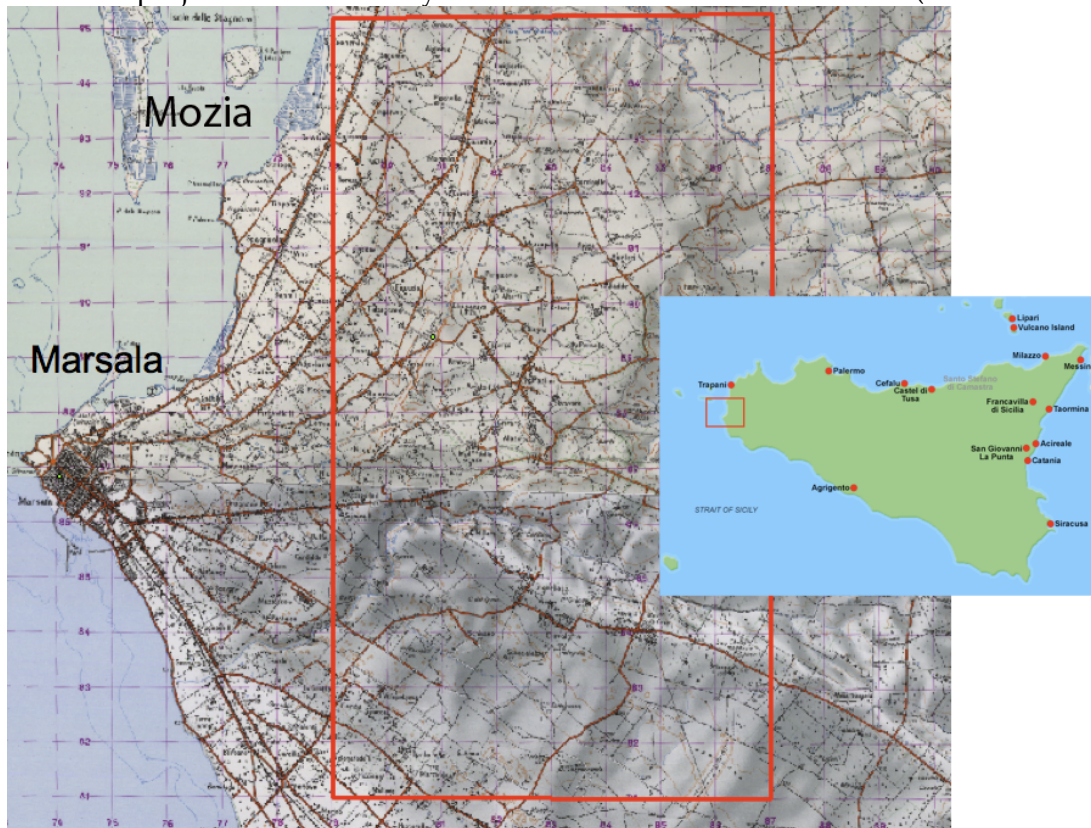


Fig. 1: MHS survey universe in its geographical context.

ity of Arizona) in collaboration with the Soprintendenza per i Beni Culturali ed Ambientali di Trapani and the staff of the Museo Archeologico Baglio Anselmi in Marsala.<sup>4</sup> MHS operated in a 112 km<sup>2</sup> area bordering Marsala (ancient Lilybaeum) on its western<sup>5</sup> side and extending eastward into the agricultural hinterland (Fig. 1).

The selection of this area for study was inspired, in the first instance, by its history as a meeting ground for native Sicilians and a succession of outsiders.

3. The first of which, as mentioned below, consisted in a pilot season of geophysical survey. The 2008 and 2009 seasons were devoted to field survey proper, while the final season, during the summer of 2010, was primarily a study season. On the "Mediterranean" tradition of survey, see Chapter 2, Section III.2.1.

4. I depend, in the following several paragraphs, on the description given by Blake & Schon 2010. Further citation will be made only in the event of direct quotation.

5. Which is to say that it did not extend all the way to the shore. The permit issued the project excluded the coast itself.

Beginning with the installation of a Phoenician enclave on the island of Mozia (on which see below), and continuing through the occupation of the region by Greeks, Roman, and Muslims, the hinterland of Marsala (itself originally a Phoenician foundation) has witnessed an ongoing encounter of cultures and peoples.

Despite the richness of its history, however, the region is also understudied. At the time MHS began its work, the area had seen only piecemeal urban excavation, as well as one small survey.<sup>6</sup> Moreover, the need for further work was becoming more acute. After decades of relative tranquility, vis-à-vis the busier eastern half of the island, the Marsala coast has seen an explosion of new growth. The multiplication of holiday homes does not merely threaten the archaeological record; it also means that Marsala's hinterland is *itself* undergoing irreversible change. The Marsala Hinterland Survey was intended to document landscapes in the process of disappearing.

At present, however, the region retains a measure of diversity. The 112 km<sup>2</sup> survey universe contains a variety of different land types, the documentation of which was accomplished during a pilot season in 2007.<sup>7</sup> In the west are low coastal plains extending 100–500 m inland, where they meet with a sharp ridge running north-south. Beyond this ridge is a region of alluvial plains which rise to approximately 150 m above sea level. The trend toward increasing altitude with distance from the sea continues beyond the eastern border of the survey universe, where even higher peaks are found. The evolution of these heterogeneous landscapes occurred over the course of several geologic periods, but they seem, grosso modo, to have achieved their present configuration no later than the early Holocene period (10,000–8,000 y. BP [Before Present]). As such, geomorphological change is unlikely to have been a factor in the patterning of remains from the centuries of interest to this thesis.

The region's hydrology, meanwhile, has witnessed much more recent changes. Probably the most significant of these affected the Birgi River, or, as it was known in antiquity, the Acithius.<sup>8</sup> "Intorno agli anni '70 del secolo scorso," Del Puglia explains, "il corso del fiume Birgi è stato deviato e reso rettilineo, abbandonando quindi, nel suo tratto terminale, il percorso dell'antico fiume".<sup>9</sup> Among the effects of this intervention (besides, that is, its obvious ramifications for the river's course) was to redimension and/or relocate the areas which were most propitious for agriculture. Its relatively modest dimensions notwithstanding,<sup>10</sup> the Birgi was almost certainly the most dependable local source of freshwater, and its banks, the best-watered local

---

6. Tusa 2005.

7. In consultation with Dr. M.C. Blake, Western Washington University: Blake & Schon 2010: 50.

8. Which, notwithstanding its archaic flavor, at least has the advantage of consistency; the river's modern nomenclature is a riot of different names. Strictly speaking, the "Birgi" comprises the straightened final portion of the river (on which see below). At its source—near Buseto Palizzolo, to the east of Trapani—it is called the F. Fittasi. Flowing westward, it joins with the F. Chuddia (also known, in the region of Salemi, as the Fosso della Collura), which is itself joined by the torrente Chitarra. Near the northeastern corner of the MHS survey universe, it is known as the F. della Marcanzotta, while beyond rt. 115, it is the F. Chinisia.

9. Del Puglia 2005: 161, n. 2. Its erstwhile course is still visible, specifically in the line described by the northern border of the comune of Marsala.

10. It is unclear whether the river was ever navigable: Del Puglia 2005: 160.

soil. The relative importance of this resource is difficult to assess, but it was doubtless more salient than it is today. It does not much diminish the sophistication of Roman irrigation works—the local extent of which, it is worth noting, we do not know—to say that they were less extensive than those of the present day. The latter have rendered the region almost uniformly well-suited to agriculture.<sup>11</sup> The change is greatest, however, in the vicinity of the region's most noteworthy hydrological feature: the Stagnone di Marsala. The present fertility of its banks belies their ancient character, which probably consisted in a shifting expanse of dunes and marshes.<sup>12</sup> It may have been good pastureland, but it wasn't primarily arable.

With regard to *modern* trends in land use, a mix of innovative and conservative impulses may be noted. As just noted, recent years have seen the accelerating construction of holiday homes on the coast just beyond the western boundary of the survey, a phenomenon which threatens the continued preservation of the area's archaeological landscape. Fishing and the production of salt, meanwhile—the former since time immemorial and the latter, since at least the construction of Marsala's *saline* in the late fifteenth century CE<sup>13</sup>—have diminished in importance.

Further inland, on the coastal plain and extending past the coastal ridge into the alluvial plains beyond, is an extensive patchwork of cleared and cultivated fields occupying some 90% of the land surface. The vast majority of these fields (70% of total area) are planted with grapes for wine, while the remaining minority (20% of total) are devoted to growing grain, olives, and a variety of garden cultivars. Most of these fields are unoccupied, belonging to farmers who reside in nearby towns or, increasingly, large corporate wineries headquartered in the area of Marsala. The remaining 10% of the land surface is characterized by exposed limestone outcroppings, locally called "sciare", which have been quarried for building materials throughout the region's history.

Alongside the series of (mostly modern) agricultural outbuildings constructed for purposes of storage and temporary occupancy, the survey universe also contains the remains of fortified farmhouses which were originally occupied on a more permanent basis. These *bagli*<sup>14</sup> (sing. *baglio*) were, between the sixteenth and eighteenth centuries CE, the nuclei of geographically-extensive estates owned and exploited by aristocrats who only sometimes lived on the premises.

## 2. Research questions.

Notwithstanding the prominence of the *bagli* in the landscape, MHS' primary interest, and the object of their primary research questions, was in a much earlier period of the region's history. Indeed, it is earlier than my own (to which, it is worth noting, not all of the project directors' questions are equally applicable). The Romans were not the first foreigners to tread Sicilian shores. They were preceded by both the

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11. Details, see below.

12. Or, in local terms, "margi", a term which, despite its derivation from the Arabic مَرْج, "meadow", "prairie", seems to mean something damper; Maurici (2005: 23) glosses the term as "depressioni acquitrinose".

13. Spadaro 2003: 21.

14. The Italian translation of the Sicilian *bagghiu*, meaning *masseria*, pl. *masserie*.



Greeks, whose presence on Sicily has been extensively studied,<sup>15</sup> and the Phoenicians, who, sailing from their homeland on the eastern shores of the Mediterranean, planted colonies as far west as Cádiz, on the Atlantic coast of the Iberian Peninsula. Not all their settlements were so far-flung, however. Sometime during the eighth or seventh century BCE, they established a trading post on the island of San Pantaleo, in the middle of the Stagnone. In the centuries which followed, this settlement—the name of which has come down to us as *Motya*, or, in Italian, "Mozia"<sup>16</sup>—engaged in trade with the indigenous inhabitants living on the mainland. The nature and extent of this interaction was of preeminent concern to the directors of MHS, whose research program defined "three interrelated binary themes: 1) the relationship between coast and interior; 2) the interactions between foreigners and natives; and 3) the interdependence of urban and rural zones".<sup>17</sup>

By the time of interest to this thesis, the "urban zone"—and thus the object of question three, above—was no longer to be found on Mozia. In 398/397 BCE, Dionysius I, tyrant of Syracuse and an implacable foe of Carthaginian power in Sicily, sacked and emptied the Phoenician enclave on the island.<sup>18</sup> Its surviving inhabitants decamped to the city of Lilybaeum (modern Marsala), which became the focus of commercial as well as political activity in the region.<sup>19</sup> The ascendancy of Rome some two centuries later did not fundamentally alter this reality, nor, in consequence, the validity of questions concerning its importance.<sup>20</sup> *Mutatis mutandis*, I do not think that *any* of the directors' three questions are obsolete for the period of this study. As will shortly be evident, the history of Roman Sicily—the term itself is telling!—was in many respects determined by the island's relationship with a foreign power (question two). And insofar as that power lay overseas, and its representatives, in port cities like Lilybaeum, the coast did not cease to be a theater for interaction (question one). In the chapters which follow, I return to these questions repeatedly.

### III. Thesis contents.

First, however, it is necessary to set the stage. This is accomplished in **Chapter 2**, "Research context", the purpose of which is two-fold. The first of these is essentially historical. Scattered references like those made above to the "ascendancy" of Rome and the rule of Constantinople are set within a history of Roman Sicily as it emerges from the primary source literature. My second aim is better described as historiographical. I consider the texts on which my history is based, and note the ways in which they are incomplete, biased, or otherwise problematic. I argue that these deficiencies have affected the historiography of Roman Sicily in some

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15. Discussion, see Chapter 2, Section II.3.1.

16. From the Greek, Μοτύη/α, which is referenced by Thucydides (6.2) and Diodorus Siculus (14.46–53). It is unclear how close this name is to the original Phoenician toponym, which has come down to us, primarily on monetary issues, in a variety of unvocalized forms: *Mty*/*Mtw*/*Hmtw*. I use the Italian name throughout.

17. Blake & Schon 2010: 51.

18. As reported by Diod. Sic. (14.47.7).

19. Mozia, meanwhile, appears to have been all but abandoned: Longo 1999.

20. Details, see Chapter 2, Section II.1.1.

consistent ways. First, they have limited the variety of history it is possible—or, in any even, seems *profitable*—to tell. And second, they have circumscribed the roles which Sicily, and Sicilian actors, played in their own story. Moreover, I explain, these biases are not limited to the ancient literature. For a variety of reasons I go on to explore, they have been propagated in the modern scholarship, too. Not all of these failings are soluble, at least given the present state of our knowledge. Others, however, may yet be rectified, specifically by archaeological research of the sort which is presented herein.

**Chapter 3**, "Methodology", lays out the principles and procedures which have informed that research. Included are a summary of MHS field survey methods, which, as executed by project participants, generated the corpus of materials on which this study depends, as well as an explanation of the criteria I employed in their analysis. These comprise, first, the principles by which I was able to classify the ceramics given me to study, and second, those which informed my assessment of their significance for local settlement history. The latter is largely a matter of their distribution in space, the analysis and visualization of which was accomplished primarily by means of the project Geographic Information System (GIS).<sup>21</sup> As such, I also explain the ways in which I made use of that software.

In **Chapter 4**, "Insights from survey", I present the results of this analysis. This is, in many respects, the heart of the thesis. In specific terms, it contains two sections. The first and longer of these describes, and assesses, the ceramic<sup>22</sup> finds from each of the eight areas surveyed by MHS. Survey areas are treated with respect to their location and physical characteristics; the nature and extent of their documentation by the project; the number and rough distribution of Roman ceramics found; the chronology of use they suggest; and, finally, the character of occupied areas. The second section takes a wider view. Observations made in the preceding section are examined for evidence of settlement patterning across a broad diachronic arc, from the third century BCE through Late Antiquity. Where possible, these patterns are related to features of the local landscape. The significance of distance from the coast, as mentioned previously, is but one of the factors considered here.

Needless to say, the demonstration of correlation is not by itself enough to prove causality. Its *repetition*, however, can certainly be suggestive. **Chapter 5**, "MHS in context", sets out to test the wider validity of the relationships mooted above. Herein, I consider the results of five other surveys undertaken in western Sicily, the nearest of them located a few kilometers to the south of the area explored by MHS, and the farthest, much deeper inland. The discussion follows a format like that of Chapter 4. In the first section, the five surveys are treated according to a standard formula. Following a brief introduction, in which the location, project time frame, and similar details are provided, I describe each project's methodology, with specific reference to the principles of artifact collection and site characterization, and results, as interpreted by the author(s). I also offer my own thoughts thereon. The nature of these remarks varies, but they are principally concerned with the value of each

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21. For which I was made generally responsible, including for periods outside of that addressed in this thesis.

22. With occasional reference to other sorts of remains, as appropriate.

project as a comparandum for MHS. (This is also where I air any doubts about the authors' interpretation of their own findings, as well as the transparency and/or broader applicability of their interpretative framework.) In the second section, I attempt a synthesis. The evolution of settlement in each area is compared with that registered at all of the others, and where there are similarities or differences, these are noted. Thereafter, I consider whether and how emergent trends may be explained—in the first instance, as in Chapter 4, with respect to geography.

It will not, I expect, spoil the surprise if I say that not all the variation observed, nor the patterning imputed, can be explained with sole reference to such features. Other factors were also involved, and in **Chapter 6**, "Conclusions", I attempt to identify them. The chapter opens with a consideration of one such factor, the relevance of which is suggested by the analysis undertaken in Chapters 4 and 5: proximity to the Roman road system. Its significance, I go on to argue, is not only a question of its explanatory force, however. It is also in what it represents: a (physical as well as metaphorical) space for the interaction and negotiation of native Sicilian—and Roman concerns. It was the changeable relationship between these groups—and, occasionally, within them—which, I suggest, provided the impetus for many of the developments we have observed. As a proof of this interpretative framework, I revisit the settlement history postulated in Chapters 4 and 5 and show how they reflect the creative tension I have identified. In certain cases, I believe it is possible to identify the interests in play. In others, however—especially later on, when Roman power begins to fragment—there is work remaining to be done. As such, I conclude by suggesting some directions for future research.

#### IV. Regarding terminology and usage.

Finally, some notes regarding the typo- and orthographic conventions employed in this thesis.

##### 1. Latin and Greek sources.

Latin terms are italicized when they are being employed in isolation. Thus, for instance, a *statio* of the *Cursus publicus*.

Passages in Latin, like those emerging from the modern language works also employed in this thesis, are set off by quotation marks. Italics are not used, save for in those cases just discussed.

Owing to the ease with which passages in Greek may be distinguished from the surrounding material, I have refrained from setting them off with either quotation marks or italicization.

##### 2. Arabic sources.

The names of Arabic authors and their works, as well as isolated terms occurring in the body of the text, are transcribed according to conventions which, grosso modo, are those established by Standard 31635 of the Deutsches Institut für Normung (=DIN 31635):

ا/إ = ' / ā

ب = b

ت = t

ث = ṭ

ح =	ظ = z
ح = ḥ	ع = <sup>c</sup>
خ = ḫ	ع = ġ
د = d	ف = f
ذ = ḏ	ق = q
ر = r	ك = k
ز = z	ل = l
س = s	م = m
ش = š	ن = n
ص = ṣ	ه = h
ض = ḍ	و = w / ū
ط = ṭ	ي / ی = y / ī

For more complete information, see [http://en.wikipedia.org/wiki/DIN\\_31635](http://en.wikipedia.org/wiki/DIN_31635) [accessed July 13 , 2012]. I depart from the DIN 31635 conventions in transcribing the article as "al-" regardless of whether it is followed by a sun or a moon letter, thus: "al-šams" rather than "aš-šams". Furthermore, Arabic terms in common use (e.g. "caliph") are given in their familiar English forms. For the names of Arab dynasties, I employ the "-id" suffix in preference to the (technically more correct) *nisbah* adjective.

Where more extensive quotation is necessary, passages in Arabic are provided in the footnotes.

### 3. Electronic sources.

When reference is made to information from a website, the citation includes two components:

1. The full URL, which, in the interest of clarity concerning what elements constitute an integral part thereof, is set in a different typeface, thus: <http://www.perseus.tufts.edu/hopper/collection?collection=Perseus:collection:Greco-Roman> . (When, as here, a URL is the last element in a sentence, a single space is interposed between the URL and the period which follows, lest the punct be understood as belonging to the URL.)
2. The date of access, which follows the URL and is enclosed in brackets, thus: <http://www.perseus.tufts.edu/hopper/collection?collection=Perseus:collection:Greco-Roman> [accessed September 3, 2011]

### 4. Technical terminology.

#### 4.1. Chronology.

In cases of possible ambiguity—as, for example, occurs in proximity to the change in era—"BCE" and "CE" are appended to dates and date ranges. Unmarked dates should be understood to refer to CE.

Parenthetical chronologies, generally comprising a range of years or, when appropriate, a single year, accompany the first mention of the individuals or literary works to which they pertain. When these chronologies are otherwise unmarked, thus: (123-176), their significance should be clear from context. Others, however,

contain a variety of (mostly conventional) abbreviations, the meaning of which is as follows:

- A. (b. 123): Born
- B. (d. 176): Died
- C. (*fl.* 123-154): *floruit*
- D. (*r.* [Caes./Aug.] 123-154): *rexit* ["as *Caesar* / as *Augustus*", for the period during which the model established by the tetrarchy remained current]
- E. (*ed.* 213): "published", in reference to a literary work

Like technical terms in Latin, statistical terms not in common use are italicized upon their first appearance in a chapter. Thereafter, however, they are formatted normally.

## CHAPTER 2. RESEARCH CONTEXT

### I. Introduction.

The questions taken up by this thesis do not exist in a vacuum. Continuing work on the archaeology of Roman Sicily provides a frame of reference within which my research may be understood. My purpose in this chapter is to give a summary description of the disciplinary context with which this project is in productive dialogue and, occasionally, tension. It is not meant to be a state of the field so much as a framework for identifying the historiographical themes to which this thesis speaks. For purposes of discussion, a classification of these themes is useful.

In the first place are concerns which, after a fashion, might as accurately be considered "historical" as "historiographical": those reflected in the primary source texts themselves. Section II begins with a brief history of Sicily during the period of interest to this paper. Thereafter follows a discussion of the primary source texts upon which this history is based. The point of the latter is to make clear that this history is the product of a wide, but in important respects limited, variety of ancient sources. Chief among these limitations is the range of ancient authorial preoccupations. These preoccupations, in turn, have helped to determine a similarly circumscribed set of modern *historiographical* themes, a discussion of which follows.

Still more consequential, however, is the fact that the documentary sources are quite simply *limited*, in number and extent. As a result, the space remaining for the contributions of archaeological scholarship should be commensurately larger. Section III rehearses the development of Roman archaeology in Sicily and identifies the contributions it has made to our understanding of the period. Such contributions, I argue, have been limited by a variety of factors exogenous to the materials themselves. Probably the most serious such impediment is the relatively greater attention archaeologists have paid to other phases of the island's history. In specific, Sicily's Greek colonial past has been emphasized to such an extent that projects have privileged the recovery and study of its material remains: with, of course, obvious consequences for those of later periods.

Moreover, it has until recently been the case that Late Antique and Early Medieval Sicilian archaeology, like the history of the island during the same period, was disproportionately interested in a handful of quite specific questions. As might be expected, these overlap in substantial ways with the subset of questions discussed in Section II (although they are not at all points coterminous). In the final section of this paper, I explain how the work presented in this thesis relates to these preoccupations, while, I hope, simultaneously destabilizing them.

### II. A short history of Sicily's long Late Antiquity.

The purpose of this section is to establish a historical context for the discussion which follows. In the first of three subsections, I draw upon the textual sources pertaining to Roman and Byzantine Sicily to establish the contours of a narrative which encompasses the centuries intervening between the third century BCE, when the island first came under Roman control, and the ninth century CE,

when it was finally wrested from Rome's eastern Mediterranean successor, Byzantium. In Section II.2, meanwhile, I engage with the texts upon which this narrative is based, especially with regard to the questions and concerns which animated them. Finally, in Section II.3, I explore the ways in which these concerns have influenced modern scholarly thought.

## 1. The view from the texts.

### 1.1. Republican period beginnings.

Roman control of Sicily was a consequence of the First Punic War, a mid third century BCE conflict pitting the city of Carthage, the preeminent commercial and military power in the western Mediterranean, against an ascendant Roman Republic. After nearly a century of struggle, the latter had secured control of virtually the entire Italian Peninsula, and its leaders were in an expansive mood. Inevitably, a rivalry developed between the established and the upstart power. The conditions were ripe for conflict, and in 288 BCE, the two parties were delivered a pretext. That was the year in which the Mamertines, a group of Campanian mercenaries, occupied the Sicilian city of Messana (modern Messina). Their presence was an affront to the tyrant of Syracuse, Hieron II (*r.* 270–215 BCE), who laid siege to the city.

The Mamertines, in response, applied for help to both Rome and Carthage. The latter were quicker to respond. The nature of their aid, however—the establishment of a Carthaginian garrison at Messana—seemed to imply that Carthage might *also* have designs on Messana. Its conquest would solidify their hold on Sicily, save for the part of it controlled by Syracuse, and so the Mamertines again appealed to Rome, this time against their erstwhile benefactors. The Romans saw an opportunity to frustrate the designs of their imperial rival, and in 264 BCE, they sent a detachment to Messana. The maneuver touched off a conflict which would last for the next twenty years. During that time, the Romans gave ample demonstration of their military prowess, including by the development of a navy to rival that of their enemy. The multiplication of Roman victories, both on land and at sea, finally induced Carthage to sue for peace. In 241 BCE, they struck a treaty with Rome, the conditions for which required, among other things, that Carthage give up control of Sicily. Rome was quick to step into the resulting vacuum of power.

If, however, the war was a proof of Roman military prowess, subsequent events were as eloquent a demonstration of the city's inexperience in the business of empire. The administration of Livy's (24.44.4) "*vetus provincia*" was characterized by a notable degree of improvisation in both structure and policy. For the fourteen years intervening between 241–227 BCE, Sicily was administered by quaestors based at Lilybaeum (modern Marsala). It was not until 227 BCE that a praetorian governor was first dispatched to the island. Sixteen years after that, the seat of provincial government changed too. The kingdom of Syracuse, which had emerged intact and independent from the First Punic War on account of the canniness of its king, was less well served by Hieron's successor. Hieronymus' support of Carthage in the Second Punic War (218–201 BCE)—a conflict which, like the first, began with a third party's appeal for Roman aid against Carthage: the Iberian city of Saguntum was under siege by Hannibal—provided Rome with a pretext for the conquest of

Syracuse. The city fell in 212 BCE. The following year, it was made the provincial capital.

Notwithstanding the conduct of the island's most (in)famous provincial governor—the Verres against whom Cicero inveighed in the case that made him famous<sup>23</sup>—the Republican administrative footprint appears to have been relatively light. In this respect, as in many of the particulars of its functioning, it was typical (or better, prototypical) of provincial government during the period.<sup>24</sup> The structure and functioning of municipal government was left basically alone. Bronze coinage issued by a number of Sicilian cities continued to circulate alongside Roman *denarii* down past the change in era.<sup>25</sup> And the *decuma*, a ten percent duty on grain established by Hieron II, remained the island's primary tax.<sup>26</sup> None of this is to say that Latin control was necessarily imperceptible. As Finley notes, the tithe to which all of Sicily was made subject had previously been collected only in the part of the island subject to Syracuse, and a series of additional obligations countenanced by the Republican tax regime were novel even in the area of Hieron's former kingdom.<sup>27</sup> The state established new five percent duties on wine and oil, both paid in kind; a five percent tax *ad valorem* on goods passing through Sicilian ports; and a pasture tax collected in coin. Undoubtedly the most significant new duty, however, was a second tithe in grain. Rome reserved the right to a further tenth of the Sicilian corn harvest, the mandatory sale of which occurred at a rate favorable to the state.<sup>28</sup> Such purchases were at first a periodic phenomenon, but, following the promulgation of a law of 73 BCE, were made an annual regularity.<sup>29</sup> The cumulative weight of such taxes must have seemed heavy indeed.

For the canny, however, provincial government furnished as many opportunities as irritants. Rome's laissez-faire approach to local administration meant that city government remained a space for the Sicilian elite to indulge their political ambitions. (That they did so may be inferred from the fact that Sicilian aristocrats are virtually absent from the politics of Rome.<sup>30</sup>) And Sicilian involvement

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23. See II.2.1.

24. On which see Richardson 1992.

25. Ettore 1927: 98-108. Between the end of the third and the middle of the second century BCE, fully 32 municipal mints were active: Guzzetta 2007: 186.

26. As mentioned in Cicero (*II Verr.* 3.12-3.15). His discussion, of course, is much later than the establishment of the tax which it concerns. The absence of apposite sources from the earliest part of Sicily's history as a Roman province means we must entertain the possibility of (probably short-lived) alternative arrangements. As Wilson 1990: 18 notes, "money taxes may rather have been levied following the model" which Diodorus suggests was operative in fifth century BCE Punic western Sicily.

27. Finley 1986: 123. The date at which the *decuma* was made a pan-Sicilian obligation is impossible to state with certainty, although it has usually been assumed that it cannot have been later than 211/210. Carcopino's (1914) alternative thesis—that the extension of the *decuma* actually occurred in 131 BCE, on the initiative of then-proconsul P. Rupilius—has been pretty conclusively refuted; see Pinzone 1955 [1999].

28. Cicero (*2 Verr.* 3.163) reports a price of 3 HS per modius.

29. Among the years in which such purchases were made are 190, 189, and 171 BCE, in all three cases to supply armies fighting in the East: Finley 1986: 123.

30. We know of only two Republican-era Sicilian *novi homines*, neither of whom was likely Sicilian Greek. Indeed, one may not even have been Sicilian. Cn. Heius, a senator in the seventies, belonged to a *gens* of Italian *negotiatores* with branches at Messana (modern Messina) and Lilybaeum, but also across



in the Roman economy, despite its sometimes onerous fiscal implications, meant that it was possible to win real as well as political capital. With the exception of the port and pasture taxes, the collection of Rome's new duties was a task which was auctioned to Sicilians.<sup>31</sup> A savvy bidder was well-situated to turn a profit on his civic duty.<sup>32</sup> Similarly lucrative possibilities, meanwhile, were available for those who *produced* the goods which were taxed. The massive growth of Republican Rome's metropolitan population<sup>33</sup> necessitated a similarly massive importation of foodstuffs, chief among them grain. The amount of corn taken in tax from Sicily was significant—Cicero, in a famous and oft-discussed passage (*II Verr.* 2.3.163),<sup>34</sup> implies that island might produce as much as 6,800,000 *modii italici* of grain per year—but it was not of itself sufficient to meet the demand. The capital was a dependable and lucrative market for anyone with corn to sell.

That such prospects were widely appealing is evident in the emergence of a new phenomenon: the presence, probably as early as the end of the third century BCE, of Italians on Sicily. The attraction, for the earliest wave of settlers, may have been rooted in trade, but it is clear that the acquisition of Sicilian land soon became an equally powerful impetus. Among the consequences of the Second Punic War was the confiscation of lands belonging to Rome's enemies; their conversion into *ager publicus*; and their assignment to parties favored by Rome, among them veterans and interested members of the elite. The latter especially were in a position to realize substantial gains, and it is likely that some came to possess extensive holdings. In so doing, they participated in a contemporary trend: the consolidation of large, although not necessarily contiguous, estates. The data are too scarce, and the degree of regional variation too great, to quantify the respective importance of large- versus small-holdings, but there is reason to suspect that the former were growing, at least in absolute terms. It is difficult, otherwise, to conceive of a context for the massive importation of slaves required by Diodorus' account of the First and Second Slave Wars, which exploded in the latter half of the second century BCE.<sup>35</sup>

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the Strait in southern Italy. Q. Caecilius Niger, quaestor in 72 BCE, was meanwhile described by a Ciceronian scholiast (Ps. Asc. 185 St.) as "domo siculus": Wiseman 1971: 22, Prosopography, nos. 73, 202. Manganaro (1982: 369-370), in his study of Sicilian senators of the Imperial period, goes so far as to dismiss both; indeed, he is convinced that "per l'età repubblicana non si possa annoverare alcun senatore siciliano".

31. Details, see Finley 1986: 125–126.

32. "The tithe levied on Sicily was supposed to approximate to one tenth of the harvest. In reality it was slightly less, since the contractors who gathered the tax of one tenth expected to make a profit and thus offered to Rome an amount that was below their estimate of one tenth of the coming harvest": Erdkamp 2005: 213.

33. See n. 47.

34. Consisting, to be specific, in a tithe of 3,000,000 *modii*, taken in tax; a second tithe, also of 3,000,000, the sale of which—at a nominal price of 3 sesterces per *modius*—was obligatory; and a series of further command purchases—price, 3.5 sesterces per *modius*—which totalled some 800,000 *modii*. Cicero also makes reference to some 50,000 *modii* which were assessed to support the governor's staff (the so-called "frumentum in cellam").

35. Parts of the narrative, which appears in the (fragmentary) books 34-36 of Diodorus Siculus' Βιβλιοθήκη Ἱστορικὴ, are preserved in the writings of the ninth century Byzantine patriarch Photius and the tenth century emperor Constantine Porphyrogenitus. (Both are provided in translation by Shaw 2001: 80-94). Though their respective versions are in some respects different, the wealth of detail both

In Diodorus' telling, the Slave Wars—essentially large-scale slave uprisings, both of which were eventually put down by Roman forces—were inspired by a climate of widespread abuse on the estates of the island's largest landowners. The historian asserts (34/35.2.27) that that the latter group included Italians as well as Sicilians, but it is notable how much more prominent the Sicilians are throughout. In the run-up to the first uprising, which began c. 135 BCE and lasted for three years,<sup>36</sup> it is only ever the natives who are identified by name. And it is a Sicilian Greek, the cruel and ostentatious Damophilus, who becomes the first casualty of the slave revolt (34/35.2.24). Italians figure somewhat more prominently in the account of the second revolt, which lasted c. 104–100 BCE and appears to have claimed the life of a P. Clonius living in the west of the island.<sup>37</sup> Though it was not yet very great, the number of Romans seems to have grown, and it appears that their holdings did too. The increasing significance of properties belonging to the Roman elite—most of whom, unlike the ill-fated Clonius, were absentee landlords—is a phenomenon which it does not seem possible to deny.

## 1.2. Developments during the Principate.

From the perspective of Roman political history, Octavian's rise to power constituted a definitive rupture. Notwithstanding his pretensions to the contrary, the latter's 27 BCE creation as *Augustus* and *Princeps* effectively spelled the end of the Roman Republic.

From the perspective of Rome's first province, the situation was somewhat more complicated. To a greater degree than perhaps emerges in the preceding section, Sicily's Republican period was defined by conflict. The island was a theater of battle during the Punic and Slave Wars, and though it is difficult to assess the damage inflicted in each case, the possibility of substantial disruption was a fact of contemporary life. The circumstances of Augustus' arrival on Sicily, in consequence, were apt to be familiar. For a period of seven months in 36 BCE, the island was once again a bone of contention. Augustus' struggle with Sextus Pompey, who had seized control of Sicily some seven years previous, was not merely the latest in a series of battles, however. For all intents and purposes, it was also the last.

The willingness of both Rome and Carthage to contend for control of Sicily had been predicated on the island's strategic importance. For virtually the entire period of interest to this thesis, Sicily's location at the center of the Mediterranean guaranteed it a role in traffic within and between the eastern and western halves of the basin. The expansion of both Latin and Punic ambitions during the Roman Republican period, however, gave it a special significance. The island lay midway between Rome and Carthage, and it was a natural front in the war (or rather, wars) between the two powers. With the resolution of their conflict in 146 BCE, that front ceased to exist. The destruction of Carthage, and the Roman annexation of Punic

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provide on Damophilus (see below) stands in clear contrast with the paucity of information concerning Italian landowners. Further remarks on the *Historical Library* as a source, see Section II.2.1.

36. Finley (1986: 139) holds that the beginning of the revolt ought to be dated to 139 rather than 135 BCE.

37. Diod. Sic. 36.3.4. The involvement of Italian slaveholders seems also to be implied by the fact that one of the two leaders of the second uprising, Salvius, bore a Latin name.

North Africa, meant that the island was quite suddenly at the center of an empire, rather than on the edge of it. As such, Sicily was insulated from the violence which remained a regular feature of life on Rome's borders. Conversely, however, it was more exposed to strife at its heart, for as long as this might last. In the event, the answer was several decades. During the wars preceding Augustus' ascension, Sicily was once again briefly implicated in a contest which threatened the integrity of the empire. Under Augustus, and for some time to come, no similar threat would be forthcoming.

Needless to say, the prospect of so long a peace was a novel one. With respect to the other consequences of Augustus' victory, however, it is frequently difficult to be sure how much change was felt. Among the apparent novelties was one occasioned by the defeat, in 30 BCE, of Marc Antony and Cleopatra. The annexation of Ptolemaic Egypt provided Rome with a source of corn which was arguably more productive than Sicily. According to one ancient author,<sup>38</sup> Egyptian grain shipments to Rome averaged some 20,000,000 *modii* annually. The emergence of a second province capable of meeting the capital's demand for grain must have lightened the onus on Rome's "vetus provincia", which had until then been the city's "larder and nurse".<sup>39</sup> Only nine years previous, during the period of Pompey's control of the island, the latter's embargo of Sicilian corn shipments to Rome had sufficed to provoke a riot.<sup>40</sup> The acquisition of Egypt meant that the stakes were no longer so high. According to Vera,<sup>41</sup> it is the context within which to understand Augustus' apparent substitution of the Republican tithe in grain, the *decuma*, with a (lighter) fixed levy, the *stipendium*.

We must be careful, however, not to overstate the importance of this change in regime. The relevant evidence consists, basically, in Pliny the Elder's (*HN* 3.91) description of several Sicilian towns as "stipendiary", which has long been understood to mean that they were paying the (fixed) *stipendium* instead of the (variable) *decuma*.<sup>42</sup> It is not clear, however, that the term can be made to do so much work, since quota systems elsewhere in the Empire survived the change in lexeme.<sup>43</sup> And in either event, it is likely that the *stipendium*, like the *decuma* before it, was levied in kind,<sup>44</sup> meaning that it was still Sicilian corn which was being shipped in tax to Rome. Finally, even if we stipulate that the *amount* of grain collected by the state did indeed change, there is at least one perspective—namely, that of Sicilian cereal-growers—from which the significance of such a development can be questioned. The government's interest in Sicilian grain derived from the fact that, by

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38. Viz., the anonymous author of the *Epit. de Caes.* (1.6: "Huius tempore ex Aegypto urbi annua ducenties centena milia frumenti inferebantur"). The text, and *a fortiori* the figure cited therein, is problematic, however; see Section II.2.1.

39. The phrase is ostensibly Cato's, as invoked by Cicero, *II Verr.* 2.5: "ille M. Cato sapiens cellam penariam rei publicae nostrae, nutricem plebis Romanae Siciliam nominabat."

40. Details concerning the riot and reconciliation appear, respectively, in Appian *BC* 5.67-74 and Dio 48.36.1. On these sources, see Section II.2.1.

41. Vera 1996: 46-47.

42. This interpretation dates back, at least, to Holm 1898.

43. Pinzone 1990 [1999]: 178-182 discusses.

44. Brunt 1981: 162.

Augustus' time, the provision of corn to a part of Rome's population was a practice of some hundred years' vintage.<sup>45</sup> In the interim, it had become more than a simple responsibility of the state. The grain distributed to a part of the urban population served to demonstrate Rome's concern for the welfare of its citizens, and as such, it was not just an obligation on whomever held power; it was a proof of their legitimacy.<sup>46</sup>

Such legitimacy, however, resided in the *fact* of the distributions, not their scope. Augustus, who decided that such grain should be distributed free of charge—it had previously been available for purchase at a nominal rate—was also responsible for limiting the number of Romans who received it. Depending on the figures one accepts, perhaps only a fifth of the city's population was entitled to a share.<sup>47</sup> A not-insignificant part of Rome's citizenry was still dependent on the market, and, if Sicily's continuing prosperity is any guide, the island remained active there.

The case of the Sicilian grain trade, in which evident change came conjoined to less evident continuity, is characteristic of the period of Augustus' rule. The latter, in the wake of his victory over Pompey, appropriated vast tracts of Sicilian land for himself and his general, Agrippa. The former lands—and after Agrippa's death the latter, which returned to imperial control<sup>48</sup>—constituted the nucleus of an imperial patrimony of unprecedented extent, and their significance cannot be underestimated. But it is equally true, from a different perspective, that the emperor was just the latest and the largest of the absentee landlords whose appearance we have already discussed. The consolidation of what would later come to be known as the Sicilian *res privata* represented, not an innovation, but the acceleration of a Republican trend. The evidence is anecdotal rather than quantitative, but in aggregate makes clear that Italian aristocrats continued to invest in Sicilian land. Otherwise, there would be little sense in Ovid's (*Pont.* 4.15.15) joke that a first-century senator could claim Sicily as his, and as little comedy in the fictional Trimalchio's (Petron. *Sat.* 48) deliberation as to whether he ought to buy the whole of the island, "ut cum Africam libuerit ire, per meos fines navigem".

### 1.3. Glimpses of a Sicilian Late Antiquity.

After Augustus' death, textual evidence for Roman Sicily virtually disappears. Our knowledge of the Republican-period tax regime (to take an example which is representative as well as relevant) is not extensive, but it seems so when compared with the single ambiguous line of Pliny discussed above. This is, for all intents and purposes, the only evidence we have for Sicilian taxation during the

45. The practice was established by the Gracchan law of 123 BCE, which foresaw the regular distribution of subsidized grain at Rome. Details, see Garnsey & Rathbone 1985.

46. "[F]rom the first century BC onwards, distributing corn was regarded as an important responsibility of the representatives of central government": Erdkamp 2000: 54.

47. Brunt (1971: 376–382) posits an urban population of 750,000 in the time of Augustus, and a dole which, at its most generous, covered some 320,000 people (c. 5 BCE), and at its most parsimonious, 150,000 (after 2 CE). Sirks 1991: 217–219 collects a number of other estimates, of Rome's population if not always of the size of the dole.

48. This, is any event, seems to be the implication of Dio 54.29.5: τῶν τε γὰρ πλείστων αὐτοῦ [sc. τοῦ Ἀγρίππα] ἐκκληρονόμησεν [sc. ὁ Αὐγουστός], ἐν οἷς ἄλλα τε καὶ ἡ Χερρόνησος ἦν ἡ πρὸς τῷ Ἑλλησπόντῳ. The Sicilian estates, unlike those at Chersonesos, are not specifically mentioned, however.

Principate. The reasons for such scarcity are easy to ascertain. Sicily's prominence in works treating Republican and Augustan history was the result of a political significance which had since greatly diminished. As Finley remarks, it is not merely an accident of preservation that "[o]ur knowledge of the history of ancient Sicily is reduced to casual references for most of the next six hundred years".<sup>49</sup> The situation is a little better than Finley makes out, but not by much. For the fourth century, we have only a smattering of incidental notices concerning the island, most of which are brief and very often banal.<sup>50</sup> Under the circumstances, it is to the credit of Sicilian and international scholars that so much has been done with so little. Efforts have been made, to all appearances often successfully, to sketch the further development of trends witnessed in Sections II.1.1 and II.1.2 of this chapter. On balance, the results are a little surprising.

The fourth century was in many respects a new beginning for the Roman empire. The constitution of Diocletian's Tetrarchy in 293<sup>51</sup> inaugurated a period of institutional reform culminating, a generation later, in the reign of Constantine I. By the time of the latter's death in 337, the character and operation of the empire has been profoundly altered. The nature of these changes, and the consequences they had for Roman society, merit a much fuller treatment than is possible here.<sup>52</sup> Among the many novelties, however, were several which we might expect to be reflected in Sicilian history as it is presented in this chapter. Instead, late third- and fourth-century developments in imperial administration; the composition of the senatorial class; and the rise of the church seem to have been less consequential in Sicily than elsewhere. During a period in which many of the empire's provinces were subdivided—a process which more than doubled their number, from forty-eight in the third century to more than a hundred in the first decades of the fourth<sup>53</sup>—Sicily remained intact. It furthermore retained its historical orientation toward the city of Rome. Alongside Sardinia, Corsica, and a variety of Peninsular Italian provinces, Sicily was integrated into the Diocese of Suburbicarian Italy, which was administered by a *vicarius* answerable to the praetorian prefect of Italy.<sup>54</sup>

If we limit the discussion to *Sicily's* administration, however, the picture is less clear. Relevant notices are extremely few, both in the textual and epigraphic corpora, and fewer still provide any detail concerning the island's government. What emerges is instead the limited participation of the insular elite. As Cracco Ruggini has observed, "il governo dell'isola...diviene appannaggio pressoché esclusivo dei rampolli della nobiltà romana," and a virtually obligatory stage in the *cursus honorum*.<sup>55</sup> Thereafter, a nobleman might reasonably expect to move on to either the

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49. Finley 1986: 154. A fuller consideration of this phenomenon may be found in Section II.2.2.1.

50. Discussion, see Sections II.1.3 and II.2.1, specifically concerning the fourth century sources..

51. For an introduction to the topic, see Rees 2004 (with bibliography).

52. See the contributions to Bowman, Garnsey & Cameron 2005, whence much of the following (brief) discussion is taken.

53. A total of 114 are listed in The *Notitia Dignitatum*, the latest parts of which—primarily concerning the west of the empire—probably date to the 420s.

54. Lo Cascio 2005: 179-182.

55. Cracco Ruggini 1980: 10.

vicariate or the proconsulate of Africa.<sup>56</sup> Comparatively few native Sicilian governors are attested for the fourth century, among them Fabius Titianus, a member of the Sicilian *gens Fabia Titiana* of Panormus (modern Palermo); Eumenius Alpinus Magnus, probably a native of Lilybaeum; and Peristerius Pompeianus, also probably of Lilybaeum.<sup>57</sup> The first of these came from an established Sicilian senatorial family, members of which are attested in Sicilian provincial administration beginning in the second century,<sup>58</sup> but the other two may have been more recently adlected.

If so, they are among the handful of Sicilians who chose to embark on a senatorial career during a period when many more might have done so. Among the most significant institutional developments to occur during the period was the massive expansion of the senatorial class, which began with Constantine's creation of a second Senate at Constantinople.<sup>59</sup> Its further growth, however, was largely a result of the multiplication of the bureaucratic corps. Relevant numbers are hard to come by, but it has been estimated that there were some 35,000 salaried officials employed by the late Empire, as compared to less than a thousand during the Principate.<sup>60</sup> If these figures are at all accurate, the size of the imperial administration grew by an order of magnitude. The evidence suggests that this expansion was possible because of the massive recruitment of the empire's curial class, whose service was increasingly rewarded with senatorial status.<sup>61</sup> In keeping with their increasingly diverse origins, this meant a commensurately more significant senatorial presence in the provinces. Sicily, however, seems to have bucked the trend. Even accounting for the vicissitudes of preservation, the (primarily epigraphical) evidence for Sicilian senators of *any* period is exiguous. We know of only seventeen senators of Sicilian extraction for the entire period of the island's Roman history up until the fourth century, and the greatest number of them (belonging, like Fabius Titianus, either to the *gens Fabia* or the cognate *gens Maesia Titiana*) must be dated to the second or third century.<sup>62</sup>

Given the long history of Sicily's subordination to Rome (to which it was furthermore geographically proximate), and the increasing onus which Diocletian's

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56. Cassiodorus (c. 490–c. 580), the roman writer and statesman who would ultimately rise to the office of *magister officiorum* under the Ostrogothic King Theodoric (r. 493–526), provides some detail concerning the career of his father, which is in this respect typical. The latter, after a term of office as the governor of Sicily (c. 490/493) and the *corrector Bruttii et Lucaniae* (at some point between 491–506), went on to become the praetorian prefect of Italy in 503: *PLRE* 2:264–265.

57. Fabius Titianus: Bivona 1980: 236, with her n. 24 for references. Peristerius Pompeianus: *AE* 1906:75, 2nd face. Alpinus Magnus: *AE* 1966: 167.

58. Bivona 1980: 237–238.

59. In the words of Heather 1998: 184, "[t]he most obvious institutional innovation of the fourth century".

60. MacMullen 1964: 306–307.

61. Sarris 2004: 293. Traditionally, holders of imperial office had been drawn from the senatorial and equestrian classes, but their numbers were initially insufficient to meet so greatly increased a demand. "At the start of the fourth century," Heather (1998: 184) notes, "the senatorial order was composed of the relatively few men—perhaps some six hundred or so—who were members of the senate of the city of Rome".

62. Manganaro 1982: 377 lists fourteen, and Wilson 1990: 384, n. 117 adds a further three, including the famed writer Firmicus Maternus. As indicated in n. 30, the two Republican-era candidates are not typically included in this number.

reforms placed on member of the curial class (which a career in the Senate might allow one to avoid), the scarcity of Sicilian senators during the Late Empire has always been a point of curiosity. Wilson, among others, has assayed an explanation of the phenomenon:

It is a reflection of the essential provincialism of the upper strata of Sicilian society, of a contentment with honours and prestige in the restricted sphere of the city, as well as with a direct involvement in running rural estates, rather than a desire for ambition for the cut-and-thrust of politics in Rome and a career in the imperial service.<sup>63</sup>

This is not entirely satisfying—to what was this "essential provincialism" ultimately owed, and why was it a feature of *this* province, specifically?—but it is convincing, as far as it goes. Of the seventeen attested Sicilian senators, only four ever advanced to the consulship, and two—probably a brother and sister, who together made dedications to Septimius Severus and Caracalla in 197 and 198, respectively—are undistinguished save for by the fact of their birth as *clarissimi*.<sup>64</sup> This, despite the fact that it does not seem likely that Sicily's elite was *unaware* of the advantages to be had from a fuller commitment to the Roman imperial system; its representatives, or at any rate their prerogatives, were visible at close range. In the fourth century, as previously in the first, there is evidence that the Roman senatorial elite owned estates on the island, and some were clearly extensive.<sup>65</sup> Among the properties belonging to Melania the Younger (c. 383–439) was an estate in the vicinity of Messina which comprised a residential *villa* and either sixty or sixty-two small farming communities worked by some 400 slaves.<sup>66</sup> Moreover, it was an estate which the proprietors knew firsthand. Having left Rome sometime before 410,<sup>67</sup> Melania and her husband spent two years on Sicily before continuing on to Africa and, ultimately, Palestine.

It is possible that their sojourn on the island was longer than was typical for the Roman elite. But if senators were as ready to hold forth on the extent their properties as Ammianus Marcellinus (14.6.10) makes out, the length of their stay will not have much mattered. Sicily's aristocrats undoubtedly knew that properties belonging to the richest senatorial families might stretch from one end of the

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63. Wilson 1990: 179.

64. Maesius Fabius Titianus, *c(larissimus) p(uer)*, and Maesia Fabia Titiana, *c(larissima) f(emina)*: CIL X 7343 (from Termini Imerese) and CIL X 7276 (from Palermo). The consuls were L. Acilius Rufus, C. Bultius Geminius Titianus,

C. Maesius Aquilius Fabius Titianus, and the Fabius Titianus referred to above: see n. 57.

65. Apart from the properties belonging to Melania the Younger, considered below, we also have evidence for Sicilian estates belonging to the Roman statesman and writer Q. Aurelius Symmachus, who refers (*Ep.* 9.52) to "rei meae Siciliensis".

66. *Vita Melaniae* 18. The Greek edition refers to 62 εποίκια, the Latin, to 60 *villulae*. At least in Egyptian contexts, Ἐποίκιον, -α seems most frequently to have referred to a labor settlement owned by an estate and inhabited by resident laborers, rather than slaves: Banaji 2001: 181–185; Sarris 2004. It is unclear if the usage here is meant to have the same resonances.

67. Or so, in any event, seems to be implied by Pall. Gal. (*HL* 61.5), who notes that Melania and her husband left Rome in time to snatch their wealth ἐκ τοῦ στόματος λέοντος Αλαρίχου. The Greek and Latin *Vitae* suggest a different context for their departure: an example of the difficulties of historical detail which attend even so well-documented a hagiographic subject. See, on this theme, discussion in Sections II.2.1 and II.2.2.3.

Mediterranean to the other: the source, if the figures in Olympiodorus of Thebes (*FHG* 4, fr. 44) are to be credited, of a level of wealth which was "almost beyond belief".<sup>68</sup> The more modest horizons of Sicily's elite made it impossible to assemble a similarly extensive portfolio.

On the other hand, they were well-placed to take advantage of opportunities at home. As will shortly be seen, there are reasons to believe that the relative extent of foreign- versus native-owned property had increased in the centuries since Augustus, but it is clear that there yet remained space for the local aristocracy to amass their own, perhaps quite extensive, estates. The Sicilian section of the *Antonine Itinerary*—a compendium of terrestrial and maritime routes including material of Diocletianic through fourth-century date<sup>69</sup>—includes several toponyms comprised of a personal name and the suffix *-iana*.<sup>70</sup> These names are generally held to refer to inhabited parts of estates belonging, at least originally, to the eponymous individual or family.<sup>71</sup> If so, it is notable that alongside well-attested Latin *cognomina* like Calvisi[an]us and Capito<sup>72</sup> are names like Comicius and Philosophus. The former is attested once in Numidia, and the latter, significantly, a handful of times in the Greek east.<sup>73</sup> Under the circumstances, it does not much strain credibility to think that they might have been Sicilian—and, moreover, Sicilians who owned on a scale sufficient to make their property points of geographical reference.

Whatever the significance of native landowning, Sicilians were possessed of other avenues for personal enrichment. The relevant evidence is of fifth-century or later date, but the phenomena it documents almost certainly originated earlier. The oldest<sup>74</sup> source is a series of three letters exchanged by Lauricius, Honorius' erstwhile *praepositus sacri cubiculi*, with the administrators of his estates in Sicily between 445–446.<sup>75</sup> They demonstrate that the absentee landlord, an archetype first encountered in the Republican era, was still relevant seven centuries later. If anything, the significance of such individuals had *increased*, and not merely on account of investment by the lay aristocracy. The correspondence of Gregory the Great, who in

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68. De Ste. Croix 1981: 120.

69. Thus the terrestrial portion, anyway, within which the latest material may be dated no earlier than 338: Arnaud 1993. According to Uggeri 1998: 53–59, the maritime itineraries may include some material of fifth- or even sixth-century date.

70. In specific, Capitoniana (88.1, 94.4); Filosofiana (88.2) or Philosophiana (94.5); Calvisiana (89.6, 95.7); Pinciana (91.2); Galloniana (94.6); Cosconiana (94.7); Pitiniana (96.6); and Comiciana (96.7).

71. Wilson 1990: 215.

72. Calvisius: *PIR*<sup>2</sup> C, 280–294, with at least nine Senatorial members. Capito: *PIR*<sup>2</sup> C, 345–349. Kajanto (1965: 235) finds at least sixteen senatorial members.

73. Comicius: *CIL* VIII, 2405 (Numidia). Philosophus: *IG* III, 1179.19 (Attica), Fraser & Matthews 1987: 469 (three Hellenistic examples from Delos, one Imperial-period from Thasos). The name is not unknown on the Italian mainland, however; cf. *CIL* X, 4918 (Venafrum).

74. Barring, that is, a (very brief) letter of Symmachus (9.52) which refers to the authors "conductorem rei meae Siciliensis". The formulation is consistent with the sort of large-scale absentee landownership under discussion, but the letter is lacking in all detail which might allow characterization of estate administration at the time of writing.

75. *P. Ital* 1.1. It is unfortunate, in light of its manifest significance for contemporary history, that Tjäder's collection of the fifth–seventh century papyri archived in the church at Ravenna contains only four documents pertaining to Sicily. (The last, which records Odoacer's 489 donation of property near Syracuse to his *comes domesticorum* Pierius, is *P. Ital* 10–11.)



his capacity as pope (590-604) maintained regular contact with a variety of interlocutors in Sicily, is eloquent testimony to the extent and productivity of the estates belonging to a different class of landlord. The churches at Rome, Ravenna, and Milan, it seems, had also come to possess substantial tracts of Sicilian land. The scope of this ecclesiastical patrimony is a subject to which we will shortly return. At present, however, it is sufficient to note that Gregory, like Lauricius before him, addressed himself to Sicilian *conductores*.<sup>76</sup> These *conductores* were large-scale lessees who, in turn, leased portions of the landlord's property to tenant farmers, or *coloni*.<sup>77</sup> Notwithstanding the fact that several of Lauricius' lessees seem somehow to have ended up in substantial arrears, *conductores* were theoretically in a position to make a lot of money. Per the standard arrangement, their financial obligations consisted in a fixed sum which they paid to the proprietor in coin. This allowed them to dispose of surplus production as they pleased, including on the market. And unscrupulous *conductores*, of which there were apparently many, stood to make even more, principally by defrauding the *coloni*. They had ample opportunity to do so, not least at tax time:

L'aderazione fiscale che pervadeva della sua logica perversa il mondo agricolo poneva a disposizione dei conduttori un ricco strumentario: se il contadino voleva dare solidi, ecco che la libbra diventava di oltre 73,50 solidi; se la cronica carenza di liquidi obbligava i rustici a chiedere la commutazione in natura, il modio frumentario saliva dai 16-18 sestari legali all'esosa misura di 25 sestari; se la proprietà ordinava acquisti da scalarsi sul canone, il prezzo già pattuito al momento del ritiro veniva adeguato ai livelli forensi del dopo-raccolto, ovviamente più bassi; la fiscalità era un'occasione per fare indebitare i coltivatori e privarli dei frutti.<sup>78</sup>

Such practices were a constant source of preoccupation for Gregory the Great, to judge by the frequency of their mention in his correspondence.<sup>79</sup>

Scrupulous and unscrupulous alike, conditions in the fourth and later centuries conspired to multiply the opportunities available to Sicilian *conductores*. Centuries after Augustus' seizure of Sicilian lands, it is clear that the emperor remained, in Cracco Ruggini's words, "[f]ra i massimi possidenti dell'isola".<sup>80</sup> We know virtually nothing about the distribution of the imperial patrimony, but there can be little doubt as to its size. According to the *Notitia Dignitatum* (1.12), the emperor's Sicilian properties were administered by a *rationalis rei priuatae per Siciliam*,

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76. Specifically, in Lauricius' case, to Cyprius, Eleutherion, Eubundus, Sisinnius and Zosimus (*P. Ital.* 1.1). Gregory's Sicilian lessors are mentioned in numerous letters—fully 74 concern the Church's Sicilian patrimony—but 1.42 is representative: the Pope addresses himself to Peter, sub-deacon of Sicily, concerning a certain *conductor*, Peter of Subpatriana, who was reputed to have embezzled three pounds of gold. For an example from Cassiodorus, see *Var.* 9.14.

77. So straightforward a translation of *colonus*, -i does not do justice to the term's complicated, and not at all points well understood, social significance. Limited ruminations thereon may be found in Section II.3.3, but a full discussion of the subject lies outside the scope of this thesis. For an introduction to the topic, see Grey 2007 (with bibliography).

78. Vera 1986: 442-443.

79. Vera 1986: 437-443 discusses. Gregory's protestations do not seem to have come to very much: see n. 203.

80. Cracco Ruggini 1980: 12.

a position which normally only existed at the level of the diocese. Such extensive properties undoubtedly employed a commensurately large number of *conductores*.<sup>81</sup> As witnessed in Gregory's correspondence, the same was true of the church. The latter, which during the tetrarchy was the object of frequent (and frequently acute) oppression, had since evolved into one of the empire's wealthiest institutions.

The Edict of Milan, issued in 313 by Constantine and Licinius, did more than simply reiterate Galerius' proclamation of tolerance for Christian worship, promulgated two years previous. It also promised to restore to Christians the property taken from them during the period of their recent persecution. That this restitution was incompletely realized<sup>82</sup> does not diminish its value as a leading indicator of Constantine's patronage of the church. The *Liber Pontificalis* (34) records a succession of lavish donations made by the emperor during the papacy of Sylvester I (r. 314–335). Alongside gifts of gold, silver, and bronze were others made in land. The rents provided by these new ecclesiastical properties—the nucleus of the *Patrimonium Petri*—went a long way toward establishing the church as a political and economic force. The origins of ecclesiastical landholding on Sicily, in specific, remain largely obscure, but there is little disagreement as to their importance. In a letter written in September of 591 (*Reg. ep.* 2.38), Gregory indicates that the Roman church employed some 400 *conductores*; analogous numbers are unavailable for the churches of Ravenna and Milan, but it is likely that they were high.

Notwithstanding its significance, the emergence of the church as a major landowner is insufficient to explain the scale of foreign investment in Sicily during the fourth century. Scholarly attempts to do so have typically made reference to a second, equally influential, development. It is a measure of Constantine's importance that both these developments were the result of actions taken by the first Christian emperor. On May 11, 330, he dedicated the erstwhile Byzantium, newly christened Constantinople, as an Imperial capital on the model of Rome. Among the privileges attendant on this status was the daily provision of bread—ἄρτοι πολιτικοί—to some 80,000–100,000 of Constantinople's citizens.<sup>83</sup> To be sure, provisions made for the city of Rome, where the *canon frumentarius* served perhaps twice as many, were even more generous.<sup>84</sup> But this fact does not diminish the scale of Constantine's enterprise. In order to assure a sufficient, and sufficiently consistent, supply of grain, Constantine decided to reassign Egypt's levies to Constantinople. As of 332, Rome

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81. Moreover, it did so on what were evidently advantageous terms. Fourth-century legislation established the right of Sicilian *conductores* of the *res privata* to pay their rents in coin, whereas in Africa a portion was mandated in grain. (Africa: *CTh.* 11.16.1, dated 27 Aug. 317 or 318; Sicily: *CTh.* 12.6.2, 12.7.1, dated 19 July 325.) The former, as explained above, was almost certainly more profitable.

82. Corbier 2005: 359.

83. Teall 1959 is basic. The size of Constantinople's *plebs frumentaria*—the population, that is, entitled to a share in the civic annona—remains a point of discussion. It does, not however, seem likely that the entire population of the city was so privileged: Carrié 2003.

84. Both in respect of the number served and the variety of provisions. With regard to the former, the size of the Roman *plebs frumentaria* has long been a matter of debate, but Vera (1997: 70) postulates that the civic annona served some 170,000–180,000 people during the Severan period, and, by the time of Constantine, should not have much declined. With respect to the latter, the distribution of foodstuffs was not restricted to grain (and, later, bread). Beginning in the third century, it also encompassed the (sporadic) sale, at an arbitrarily low cost, of wine, oil, and pork: Carrié 1975: 1068.

would no longer be entitled to Egyptian grain.<sup>85</sup> Its diversion posed a logistical challenge for the old imperial capital. Rome in the fourth century was a great deal less populous than it had been under Augustus, but it remained a substantial city. Moreover, it had long ago become accustomed to being provisioned from the provinces.<sup>86</sup> Under the circumstances, we should not be surprised if Sicilian corn once again became an important commodity.

What *is* surprising, however, is the manner in which it was evidently procured—or better, the way in which it was *not* procured. To judge by the limited evidence, the onus of Rome's provisioning fell more heavily on North Africa than Sicily. Fourth-century rescripts make clear that the emperor took an interest in virtually every aspect of the cultivation, transport, and delivery of African corn to Rome. The region boasted a network of municipal granaries; a fleet of state-provided wagons for freight, the *cursus clabularius*; a system whereby private shippers, called *navicularii*, registered to transport the capital's grain; and a bureaucracy to manage it all, led by the *praefectus annonae Africae*.<sup>87</sup> The Sicilian material, meanwhile, mentions none of these things. Arguments *ex silentio* are always problematic, of course, and the more so when the period in question is one for which documentary evidence is simply scarce. Nevertheless, the difference is arresting. Furthermore, it seems to be sharpened by such material as *does* exist. There is, to date, no evidence for Sicilian *navicularii* at Ostia; but there *is* a passage in the first of Lauricius' letters in which he directs his agent to procure a ship for the transport of produce either to Ravenna or "horreo nostro" in Rome.<sup>88</sup> Private enterprise—here responsible for the transportation, storage, and ultimately disbursement of Lauricius' produce, not just its cultivation—played an important role in the exploitation of Roman Africa's agricultural resources, and its significance should not be minimized. But it seems to have played a much more nearly exclusive role in Sicily. This apparent dichotomy led Vera to envision a "suddivisione di ruoli fra una Sicilia prevalentemente 'commerciale' e un'Africa prevalentemente 'annonaria'".<sup>89</sup> The former, in his telling, was much the more congenial situation, and should have provided a powerful stimulus to aristocratic, ecclesiastical, and even imperial landowning.

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85. According to a notice in *Chron. Pasch.* I (p. 531: Ἰνδ. ε'. κζ'. ὑπ. Πακατιανοῦ καὶ Ἰλαπιανοῦ. / Ἐπὶ τούτων τῶν ὑπάτων ἤρξατο ἀναλίσκεσθαι τοῖς πολί-/ταις Κωνσταντινουπόλεως ὁ ἄρτος ἀπὸ τῆς μαΐου), the Constantinopolitan annona was instituted on May 18, 332.

86. On which more generally see the contributions to Papi 2007. By the end of the fourth century, the urban population may have numbered between 300,000–350,000 individuals: Sirks 1991: 227. If so—and, furthermore, if Vera 1997–1998: 70 is correct in positing that the *plebs frumentaria* were not much less numerous in the fifth century than they had been in the first—then it may ironically have been the case that the civic annona was relatively *more* generous during the period of Rome's eclipse than during its ascendancy.

87. Rickman 1980: 202–203 summarizes. This is the context in which it is easiest to understand the manifestly unequal terms under which Sicilian and African *conductores* operated: see n. 81.

88. *P. Ital.* 1.1.32–35: Si navis fuerit inventa, quae ad Rave[nnat]e[m] / [portu]m feliciter oportuno tempore disponat, transmittit, et ne forte / [non inv]enias, qui Ravenna veniat, ad urbem mittatur et in horreo nostro / [c]onsignetur.

89. Vera 1997–1998: 39.

#### 1.4. The long Byzantine afternoon.

To the best of our knowledge, these were the circumstances in which Sicily found itself on the eve of its reemergence from obscurity. Events in the fifth century conspired to place it once more in the path of history, or rather a history: Procopius' *On the Wars*, which dates to the middle of the sixth century.<sup>90</sup> The work, which chronicles the campaigns of the Eastern Roman Emperor Justinian I (r. 1 Aug. 527–13/14 Nov. 565) in the old Roman West, is probably the most important source for events pertaining to Sicily in the previous century (although some relevant notices also appear in Jordanes and Victor of Vita<sup>91</sup>). The Vandal conquest of North Africa, complete in 439 with the fall of Roman Carthage, meant that Sicily was once more caught between two antagonistic powers. The Vandals, of course, could not muster Rome's numbers, but under their king, Gaiseric (r. 428-477), they did not lack for ambition.<sup>92</sup>

As had earlier occurred, the island again became a bone of contention. Vandal raids on Sicily, which began in 440, would continue for a generation, finally culminating in the capture of the island in 468.<sup>93</sup> The "Vandal period" of Sicilian history, if indeed so brief and tenuous an interlude merits the name, lasted a scant eight years. In September or October of 476, Odoacer, who had earlier that year deposed the last western Roman Emperor and made himself King of Italy, contracted with Gaiseric for control of Sicily, in return for which he and his Ostrogothic successors would pay an annual tribute.<sup>94</sup> The stability of this arrangement, as indeed of the Vandals' ability to dispose of an island over which their hold was nominal at best, was essentially nil, and Vandal raids seem to have resumed shortly thereafter. A slightly more permanent solution was achieved c. 500, when Gaiseric's grandson, the Vandal king Thrasamund, sealed an alliance with the Ostrogothic king Theodoric by means of a marriage to Theodoric's widowed sister, Amalafrida. Included in her dowry was the westernmost part of Sicily, including the promontory on which Lilybaeum was located. The alliance bought both parties, and the island control of which they shared, some twenty-three years of peace.<sup>95</sup>

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90. Properly Ὑπὲρ τῶν πολέμων λόγοι, although frequently rendered in Latin as *De bellis*. Procopius' history comprised eight books, the first seven of which were likely complete c. 545, and the eighth, c. 553. The work is frequently subdivided according to the conflicts treated therein; thence the conventional references to books 1-2 as *De bello Persico* (BP), books 3-4 as *De bello Vandalico* (BV), and books 5-7 as *De bello Gothico* (BG). The eighth book, which is largely concerned with the last phase of the war waged between Byzantium and the Ostrogothic rulers of the Italian Peninsula, is sometimes referred to as BG 4.

91. See nn. 92 and 94, respectively.

92. There can be little doubt that Gaiseric (alternatively Geiseric or Genseric) fully merited Jordanes' (Get. 33.168) characterization of him as a canny operator. (He is described as "animo profundus" and "ad sollicitandas gentes providentissimus", among admittedly less-flattering terms.) As Pohl (2004: 38) says, he "was one of the most successful, and longest-living, of all the rulers of the turbulent fifth century, during which so few enjoyed a long reign". For a fuller accounting of his deeds than is possible here, see Clover 1966.

93. Procop. BV 1.5.18-25, 1.22.13-18. Except where otherwise indicated—as for example in n. 94—the narrative which follows is based on information presented in the early chapters of *De bello Vandalico*.

94. The settlement is discussed in Victor Vit. 1.13-14.

95. For an assessment of these several arrangements, see Clover 1999.

Upon Thrasamund's death in 523, however, his cousin Hilderic ascended the throne. Hilderic, whose mother Eudocia was the daughter of the late Western Roman Emperor Valentinian III (r. 425-455), professed his mother's Catholic faith, rather than the Arian creed espoused by Thrasamund and Amalafida. This alarmed the Vandal nobility, who threw their support behind a 530 revolt headed by Geilamir, an Arian Vandal cousin of their Catholic sovereign. Geilamir's triumph was short-lived. Hilderic, it seems, had maintained good relations with the new-made Eastern Roman Emperor Justinian. In Hilderic's restoration, the latter had a pretext for embarking upon the project for which he is arguably best known: the "renovatio imperii", or restoration of Rome's Mediterranean empire. In rhetorical terms, this was to be a crusade of sorts: the erstwhile western provinces had fallen into the hands of heretics, and it was Justinian's responsibility, as Christian emperor, to bring them back into the fold.<sup>96</sup> In practice, it meant the beginning of the campaigns documented by Procopius. Vandal North Africa fell to Justinian's general Belisarius in 533. The rapidity of Belisarius' conquest was such, Procopius (BV 1.17.11) tells us, that Justinian's champion arrived in time to sit down to Geilamir's dinner, abandoned in the moment of the latter's flight. (If not, unfortunately given the ostensible *casus belli*, in time to save Hilderic, by then slain on Geilamir's orders.) Belisarius subsequently turned his attention to Sicily, which fell in 535. Two years later, Justinian issued a law establishing the terms on which Sicily was to be governed as a Roman province. *Novel 75*<sup>97</sup> preserved the by-then typical separation between civil and military authorities, the former based at Catania and the latter at Syracuse. It also, however, made both answerable to the *quaestor sacri palatii* at Constantinople. So direct a link with the imperial seat was unprecedented. Sicily, at least in theory, and notwithstanding its distance from the capital, could be administered directly from the center, "quasi che si trattasse di una proprietà privata dell'Imperatore".<sup>98</sup>

The reasons for so direct an interest are not hard to discern. As in previous centuries, Sicily's position at the center of the Mediterranean made it an ideal staging ground for campaigns waged by Byzantium in the west: a theme to which I return below. So, too, did its agricultural fecundity, which Zuckerman attempts to quantify on the basis of evidence from the seventh and eighth centuries.<sup>99</sup> The seventh century data, which concern the patrimony of the Church of Ravenna, emerge from Agnellus' mid-ninth century *Liber pontificalis ecclesiae Rauennatis*. During Maurus' term of office as bishop (648-671), Agnellus (*LPR* 111) tells us, Ravenna's Sicilian possessions were worth some 31,000 *solidi* annually, of which some 15,000 were paid to Constantinople

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96. Examples of Justinian's rhetoric are scattered throughout the several sections of the *Corpus iuris civilis*, a compendium of old and new laws composed between 529-534. Among the clearest statements of the idea is to be found in the emperor's *Constitutio Deo auctore*, which dates to 530. For an English translation and discussion of the text, see Haldon 1997: 17-19.

97. *De appellationibus Siciliae*, issued November or December, 537. The text is identical to that of *Novel 104*, entitled *De praetore Siciliae*. Both appear in the so-called "Greek Collection of 168", which is the most extensive collection of Justinian's *Novels*: Kearley 2010: 387-390. Notwithstanding the existence of Greek epitomes thereof, the text seems originally to have been written in Latin. See, for text and annotation, Schoell & Kroll 1912: 378.

98. Cracco Ruggini 1980: 24, paraphrasing the text of *Novel 75*, wherein Justinian refers to Sicily as "nostrum quodammodo peculium constitutum".

99. Zuckerman 2005.

in tax, and 16,000 to the church as rent. The latter also received 50,000 *modii castrenses* of wheat, which, at probable seventh century prices, would have been valued at about 1600 *solidi*, or 10% of the rent paid in specie.<sup>100</sup> The Roman's Church's estates, to all appearances the most extensive,<sup>101</sup> were more lucrative still. In the early part of the eighth century, Theophanes reports, the rent on Papal domains in Sicily and Calabria came to 3.5 *centenaria* of gold, or approximately 25,500 *solidi*.<sup>102</sup> If, as Zuckerman assumes, the size of these churches' properties was proportional to their rents, then it stands to reason that "the estates of the see of Ravenna should have made up about 21.1% of the total cultivated areas of the region, as compared to 33.3% for the Church of Rome".<sup>103</sup> Calculating the productivity, in real terms, of such extensive estates requires that Zuckerman make some further assumptions. He begins from the presumption that at least some portion of the tax collected by the state was paid in kind.<sup>104</sup> In specific, he stipulates that the quantity received in kind will have been 10%, on analogy with the proportion of the rent so collected by the Church of Ravenna. If so, the volume of grain paid by Sicily in tax, during the first quarter of the eighth century, will have come to approximately 225,000 *modii castrenses*: "probably enough for the Byzantine troops in Southern Italy".<sup>105</sup>

Given Zuckerman's assumptions, we would be wise to profess some skepticism regarding the accuracy of his figures. He is not probably wrong, however, regarding the *scale* of Sicilian production, nor, more to the point, the strategic importance thereof. Constantinople, like Rome before it, was at pains to assure the timely and adequate supply of its forces—the *annona militaris*—throughout the Mediterranean. The two cities' means of doing so varied, however. In the seventh century, the provisioning of Byzantine forces was delegated to land-owning members of the military, and was levied, insofar as was possible, from lands in the vicinity of the forces thus supplied. In other words, the policy was designed to minimize the distance army provisions needed to travel. The outcomes of this policy were sometimes perverse. As Prigent notes, the number of troops stationed in a particular region "n'est pas proportionnelle à l'importance des forces qui s'y trouvent cantonnées mais aux capacités productives des zones concernées".<sup>106</sup> In the case of Sicily, however, strategic as well as logistic concerns militated for the presence of a substantial force.

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100. For "probable seventh century prices", see Zuckerman 2005: 103, n. 69. The *modius castrensis* was equivalent to approximately 1.5 *modii italici*.

101. Enough so that, by 592, Roman Church property was administered by not one but two *rectores*, the senior based at Syracuse, and the junior at Palermo: Rizzo 2002: 126, n. 41. The limited quantitative data we have available on the papal patrimony reinforce the impression of territorial and economic significance. By the turn of the seventh century, Cracco Ruggini (1980: 13) reckons, "la sola Chiesa Romana disponesse in Sicilia di circa 3.200.000 iugeri, cioè 800.000 ettari, suddivisi fra 400 grandi affittuari e approssimativamente 250 famiglie coloniche per ogni affittuario".

102. Zuckerman 2005: 102. It is difficult, for reasons discussed below (see n. 163), to be more chronologically specific than this.

103. Zuckerman 2005: 103.

104. There are reasons to suspect that this is a historically accurate, and not just operationally sensible, assumption, especially during the seventh century: see discussion on p. 29.

105. Zuckerman 2005: 104. On the number of troops involved, see below.

106. Prigent 2008: 8.

For an emperor bent on the reconquest of the old Roman west, the island provided familiar strategic advantages: among other things,<sup>107</sup> it was the jumping-off point for Byzantine troops engaged in battle with the Goths of Peninsular Italy. Data concerning the size of the garrison are few, but Procopius (*BG* 1.5) reports that Belisarius arrived with infantry, horsemen, and sailors numbering 10,000, all told. There is no way to know how many of those *remained* on the island, but they cannot all have vacated: as fortune would have it, developments in the seventh century conspired to maintain Sicily's strategic relevance. In 618, a resurgent Persian empire wrested control of Egypt from Byzantium, then under the rule of emperor Heraclius (r. 5 October 610–11 February 641). Ten years later, Heraclius managed to win it back, but the re-assertion of Byzantine sovereignty was ephemeral. In 642, Muslim forces took Alexandria, and with it, control of Egypt. In 647, they conquered North Africa. The latter, after its fall, became a bridgehead for Muslim attacks on Sicily, the first of which may have taken place as early as 652.<sup>108</sup> Regardless of the moment of their inception, such raids were to be a regular feature of seventh and eighth century Sicilian life. The threat they posed, to Byzantine power in general and the island's agricultural wealth in particular, helps to explain one of the more curious episodes in contemporary Byzantine history. In 663, the emperor Constans II (r. Sept. 641–15 Sept. 668) decided to move the imperial court to Syracuse. Constans'—Byzantium's—"Sicilian period" lasted a scant five years, after which the emperor was killed, allegedly in his bath, by Mezezius, an Armenian general and usurper (who was himself deposed shortly thereafter).<sup>109</sup> Constans' "Sicilian expedition" is interesting for a variety of reasons, but one in particular is relevant to the present discussion of Byzantine military strength on Sicily. Paul the Deacon (*Hist. Lang.* 5.10) implies that the emperor was accompanied by more than twenty thousand soldiers. This number is almost certainly inflated, as McCormick argues, by the author's desire "to magnify a Lombard victory over superior forces",<sup>110</sup> but the real figure was still probably substantial. Zuckerman estimates the number of "Byzantine troops in Southern Italy" c. 730—that is, when the emperor was no longer in residence—at some 5,500.<sup>111</sup>

Notwithstanding the importance of such commitments, Sicilian corn had an even more significant role to play during the period under discussion. The loss of Egypt and North Africa was a civilian as well as a military disaster. Constantinople's

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107. Jordanes (*Getica* 303) reports an almost-certainly-apocryphal story in which Petrus Marcellinus Felix Liberius—patrician and erstwhile commander of Justinian's forces in the west—sailed from Palermo to begin the Byzantine conquest of Spain.

108. This is the traditional date of the first Arab raid. Stratos 1976 has argued, however, that it is an error, and that Muslim attacks did not in fact begin until 669. Their later development would be the same, however.

109. After which Constans' son, Constantine IV (r. 15 Sept. 668–Sept. 685), assumed the throne, now again at Constantinople. Constans' Italian adventures are treated in Corsi 1983. On the primary sources, see p. 36.

110. McCormick 1998: 31, n. 28. The argument for skepticism is convincing, since, as McCormick further notes, the figure is immediately preceded by "a cautious 'ut fertur'", viz. "Postquam uero imperator Neapolim peruenit, unus ex eius optimatibus, / cui nomen Saburrus erat, ab augusto, ut fertur, uiginta milia militum expetiit, seque / cum Romualdo pugnaturum uictoremque spopondit."

111. See n. 105.

population, as we have already noted,<sup>112</sup> depended on Egyptian grain, and its loss had immediate repercussions. In 618, before the Persian conquest of Egypt was even finished, Heraclius discontinued the free provision of grain to the Constantinopolitan *plebs frumentaria*.<sup>113</sup> One year later, Prigent has convincingly argued, the government made the first in a series of large-scale purchases of Sicilian corn. Proof of the latter initiative is absent from the texts but ample in the archaeological record. In specific, a massive quantity of old sixth-century bronze issues, theretofore stockpiled at Constantinople, were returned to circulation; countermarked, according to a consistent iconographic scheme; and sent from the capital to Sicily.<sup>114</sup> Similar infusions appear to have continued for the next twenty years. Constantinople's reliance upon Sicilian grain, though originally a result of crisis, quickly became a stable fact: in Prigent's words, "au moins jusque dans le premier quart du VIIIe siècle".<sup>115</sup>

In view of Sicily's prior history as a source of grain, the importance of which we have several times observed, it might reasonably be wondered what was noteworthy about this state of affairs. The answer lies not in the *scale* of Sicilian production, concerning which we have already speculated, but rather in the interest the state began to take in it. Vera's "Sicilia commerciale", which had for centuries escaped the annony obligations levied on North Africa and Egypt, could no longer depend on the state's benign neglect.

In at least one respect, however, the regime was not entirely new. To the degree that it affected the balance of power which had previously obtained between the island's most important economic actors, it is better understood in light of changes which began in the fifth century. In 455, Gaiseric made good on the threat inherent in his people's conquest of North Africa and refused to continue grain shipments to Rome.<sup>116</sup> In an effort to make up the shortfall, Rome's Gothic rulers increased the tax burden on Sicily.<sup>117</sup> Doing so, however, cut into the margins theretofore enjoyed by the island's large-scale producers. Land-holding members of the native Sicilian aristocracy were doubtless affected, but as suggested above, they had others avenues by which to profit from the island's lucrative system of land tenure. The onus, in Vera's telling, actually fell heaviest on the Roman senatorial aristocracy:

gli inasprimenti fiscali operati in Sicilia dai Goti andavano a colpire una nobiltà impoverita, spogliata delle terre africane e di tutti i possedimenti delle province occidentali ove si erano formati i regna barbarici, che sulle residue terre siciliane e italiche aveva dovuto tollerare un grosso prelievo annonario per Roma e per l'apparato governativo gotico.<sup>118</sup>

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112. See discussion beginning on p. 22.

113. As reported in *Chron. Pasch.* I, p. 711.

114. Prigent 2006.

115. Prigent 2008: 13.

116. As discussed by Giunta 1956.

117. As attested by Cassiodorus (*Var.* IV.7, 9, 10–12) and Agnellus (*Lib. Pont.* 20).

118. Vera 1997–1998: 72. He furthermore notes that it was the oldest senatorial families—"quelle i cui patrimoni 'sparsi per tutta la terra' si erano formati durante la pace imperiale"—who were hardest hit.



The Byzantine conquest of Sicily did little to reverse this trend. In 554, Justinian published a *pragmatica sanctio* which granted the native Sicilian elite the power to appoint a *iudex provinciae* selected from among their number.<sup>119</sup> Power over the island, which had for centuries been an "appannaggio pressoché esclusivo"<sup>120</sup> of the Peninsular aristocracy, was no longer a prerogative on which they could depend. Byzantine *tax* policy, especially in the following century, was no more advantageous. Prigent<sup>121</sup> has convincingly argued that the seventh century witnessed an empire-wide preference for the collection of tax in kind: a phenomenon which undermined the old imperial aristocracy. The marginalization, and in some cases impoverishment, of the senatorial aristocracy was a long and complicated process,<sup>122</sup> but such developments doubtless had a hand in it.

The consequences of eastern Roman rule were not only felt by the secular elite. Ecclesiastical interests were affected, too, if not perhaps so gravely or so conclusively as those of the Roman senatorial class. The fiscal obligations laid on the latter's property did not always fall with equal weight on estates belonging to Peninsular (or for that matter Sicilian<sup>123</sup>) sees. But the churches of Milan, Ravenna, and especially Rome were susceptible to a series of developments, specifically in respect of evolving "catholic" dogma, which were peculiar to them, and which ultimately saw them fall from the emperor's good graces.<sup>124</sup> The theological aspects of this estrangement are too large a subject for consideration here, but there were political ramifications, too. One in particular is relevant to the present discussion. Rome's violent opposition to the early eighth century development of Iconoclasm<sup>125</sup> evidently convinced emperor Leo III (*r.* 25 Mar. 717–18 June 741) to seize the church's estates in Sicily and Calabria. The cost to Rome in rent was enormous: the passage of Theophanes whence Zuckerman takes his figure of 3.5 *centenaria*—and which he subsequently manipulates, as witnessed above—is a discussion of what Peter's church lost to Constantinople.

Taken together, such developments suggest that Sicily had by the eighth century experienced notable ruptures, at least with respect to a handful of dynamics established during earlier phases of the island's Roman history. Nevertheless, they were to prove less consequential than events which occurred during the ninth. By then, military conflict with the Muslim lords of North Africa was a phenomenon of nearly two hundred years' standing. Periodic raids emanating from modern Tunisia were doubtless an important factor in the militarization of the island's administration: a process which, in scholarly discourse, has come to be referred to as the "thematization" of the Byzantine empire.<sup>126</sup> The specifics of Sicily's

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119. The document is published as Appendix II, VII to the *Nov.*

120. See n. 55.

121. 2008.

122. On which see Brubaker & Haldon 2011: 575–591.

123. About which we know comparatively little. For a discussion of the church's organization and character, see Wilson 1990: 308–309.

124. Zuckerman 2005: 85–94 summarizes.

125. See, for an introduction to the topic, Brubaker 2012.

126. Brubaker & Haldon 2011: 765. The authors also provide a concise summary of what this entailed, as well as its probable timeline: Brubaker & Haldon 2011: 769–770.

"thematization" are basically lost to us, but scholars have long suspected that the island was an early bloomer, relatively speaking. A passage in the *Liber Pontificalis* pertaining to 701 attests to the existence of a Sicilian στρατηγός, or military commander, responsible for the island's defense.<sup>127</sup> In 824, however, the conflict entered a new phase. The first continuator of Theophanes (*TheophCont* 2.27) recounts that a certain Euphemius, then τουρμαρχης of the Sicilian theme, appealed to Ziyādat Allah I, the Aġlabid emir of Tunisia, for support in an abortive coup. It was a fateful mistake. Euphemius' invitation provided the Aġlabids with the opportunity they needed to embark in earnest on the island's conquest. The Muslim advance was slow (indeed it sometimes stalled<sup>128</sup>) but inexorable. On June 17, 827, an Aġlabid force comprising 700 horse and 10,000 foot made landfall near modern Mazara del Vallo.<sup>129</sup> In 965, after 141 years of war, the final Byzantine redoubt—at Rometta, 12 km to the west of Messina—fell to the conquerors. Sicily's Byzantine period was over.

## 2.A blinkered view.

Thus, in any event, we are told. As befits the history of an island which at various points found itself at the center of Mediterranean power politics, the narrative is an exciting one. But it is also one which leaves more than a little to be desired. In part, this is a reflection of decisions that I, as the "narrator", have made. More, for instance, could be said concerning Sicilian religious demography during the centuries of interest to this thesis. In particular, the "Christianization" of the island—a regular subject of discussion among Sicilian and international scholars of the period; see Section 2.3—is significant from a documentary as well as a historical perspective, since it provided the context for the production of an important hagiographic literature which flowered beginning, probably, in the fourth century.<sup>130</sup>

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127. There is no surviving evidence for the appointment, but the attestation of a Sicilian "stratigos" in *LP* I 383, which describes events of 701, indicates that it had nevertheless been made. Notwithstanding the fact that the selfsame term was later employed to characterize the military governors of Byzantium's ninth-century themes, however, it is unclear to what degree, and when, Sicily's actually changed: see p. 37, with n. 164.

128. The conquerors faced a gamut of difficulties which went far beyond the inevitable Byzantine resistance. Conflict between Arab and Berber Muslims resident on the island twice resulted in civil war, first in 886 and again in 898. Muslim North Africa, meanwhile, was riven by dynastic struggles, an adequate treatment of which lies beyond the scope of this thesis. Suffice to say that, though it was the Aġlabids who began the conquest, they did not survive to see it completed. Control of the island passed to the Fāṭimids, in 909, and thereafter the Kalbids, a Sicilian dynasty descended from al-Ḥasan al-Kalbī, whom the Fāṭimid caliph had appointed emir in 948.

129. The Arab sources differ somewhat in respect of their figures. The numbers I quote are those which Maurici (2005: 47) considers "piuttosto attendibili"; they belong, concretely, to al-Nuwāyirī (*Nihāyat al-ʿarab* [BAS 428]: *وكانت سبع مائة فرس وعشرة آلاف راجل*). On the difficulties posed by the Arab historiography—and, such problems notwithstanding, the necessity of its use—see p. 37.

130. Specifically, with the composition of the *Martyrium* of Euplius, the earliest redaction of which does not probably much post-date the saint's death c. 304: Motta 2004: 22-23, 29. The chronology of Sicilian hagiographic texts is rarely so easy to determine, but it seems safe to say that the genre remained a fruitful one for essentially the entire period of interest to this thesis. For a discussion of this literature as it applies to the questions posed in this thesis, see below.

In part, however, it is also a result of deficiencies in the narrative itself, which I have given, if not exhaustively, then hopefully in detail sufficient to show that it is possessed of weaknesses as well as strengths.

### 2.1. The limited corpus.

The greatest of these weaknesses, of course, is that the sources on Roman, and especially Late Antique Sicily are limited in number. This is a constraint to which I have alluded, at various points, in Section II.1, but it merits a fuller treatment here. Notices concerning Republican-era Sicily are basically limited to Diodorus Siculus' *Historical Library* and Cicero's *Verrines*, neither of which is an ideal source. The former is a universal history published sometime between 36-30 BCE.<sup>131</sup> Of the original forty books, only 1-5 and 11-20 are extant. The last of these is current to the end of the fourth century BCE, after which the narrative is preserved only in fragments. Sicily's history as a Roman province, meanwhile, began in 241 BCE, and Diodorus' treatment of it is unfortunately incomplete. Cicero's *Verrine*—a rhetorical broadside in two parts, of which only the first was ever delivered—present problems of character, not completeness. Cicero, then still a relative unknown, composed them for his prosecution of the eponymous Gaius Verres, who in 70 BCE was on trial for malfeasance in his capacity as the recent (73-71 BCE) governor of Sicily. The text is complete, but its value as a window onto contemporary Sicilian affairs is limited by its (quite deliberate) tendentiousness.

Sources on early Imperial Sicily are a little more numerous, but not much less problematic. They are, as discussed above, most extensive for the period of Augustus' rule. Unfortunately, this is not to say that the works themselves are Augustan in date. Ovid's jest concerning the extent of Roman land-holdings in Sicily<sup>132</sup> is one of the few comments on Augustan Sicily produced by a contemporary writer. Our two most important sources on historical developments of the period—Appian and Cassius Dio, whose identically-titled surveys of *Roman history* recall Augustus' struggle with Pompey in Sicily<sup>133</sup>—were written long after the events they purport to describe. Appian's history is a product of the middle of the second century, and Cassius Dio's is perhaps as late as the beginning of the third.

Such distance is typical even of the scattered incidental notices employed to write the history of Augustan Sicily. Pliny's *Natural history*, whence comes the aforementioned reference to "stipendiary" Sicilian towns,<sup>134</sup> was written during the last quarter of the first century, and as such is unusually close to its period of interest. An equally-important datum, concerning the 20,000,000 *modii* of grain Rome received from Egypt during Augustus' rule, is reported by the anonymous *Epitome de*

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131. As discussed in the translator's introduction to vol. 1 of Oldfather 1933. On "universal history" as a genre, see Mink 1978.

132. As invoked in Section II.1.2, above.

133. In specific, in App. *B Civ.* 4-5 and Cass. Dio 48. The former title—*Bella ciuila*, in full—is conventionally used to refer to books 13-17 of Appian's *Ρωμαϊκά*, itself more frequently rendered by the Latin *Historia romana* or, as here, its English translation.

134. See p. 15 with n. 42.

*Caesaribus*, which cannot be earlier than 395.<sup>135</sup> Questions of accuracy aside,<sup>136</sup> the epitomator's figure is hard to reconcile with the testimony of Josephus, which is earlier but not much less opaque. The latter says that during Vespasian's reign (1 July 69–24 June 79), Egypt provided four months' worth of Rome's annual grain supply (*BJ* 2.386) and North Africa, eight months' worth (*BJ* 2.383).<sup>137</sup> His premise—that North African production had increased in the intervening decades—is acceptable.<sup>138</sup> Most other aspects of these passages' interpretation, and thus their historical implications, remain the subject of debate, however.<sup>139</sup> Not least is the question of whether it is indeed plausible that Egyptian production should have fallen off quite so dramatically as Josephus seems to presume.<sup>140</sup> The extreme scarcity of relevant testimonia—indeed, of virtually *any* testimonia for second- and early-third century Sicily—makes it hard to provide a definitive answer.

Obviously, this is not much to go on. In comparison with the sources for third and fourth century Sicily, however, it is an embarrassment of riches. As noted at the outset of Section II.1.3, the number of texts pertaining to the beginning of this thesis' period of interest is discouragingly small, and their content, frequently thin. Such is the case, for example, in the fourth-century *Expositio totius mundi* (65), where the discussion consists basically in an inventory of the island's products; an elogium of its cities; and an appreciation of Mount Etna (where "si dignum est, divinitas est...quoniam diebus noctibusque ardet in capite montis"). It is also largely true of the poetry of figures like Prudentius (348–c. 410) and Salvian (b. 400–405), or of the oft-discussed *Historia Augusta* (now most frequently assigned to the late fourth century<sup>141</sup>). These works tend to reproduce a variety of topoi, concerning, among other things, the island's fertility and secular tranquility.<sup>142</sup> And, finally, it is the case

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135. I.e., the year of Theodosius' death, with which the *Epitome* concludes. For the passage in question, see n. 38.

136. It is not only on account of its relative age that we may doubt the figure of 20,000,000 *modii*. Schlumberger's (1974) conclusions regarding the author's sources have not been universally accepted, and as such, there yet remains substantial confusion concerning the identity, and hence the credibility, of the texts on which the *Epitome* is based: see, most recently, Burgess 2005.

137. Josephus, *BJ* 2.386: [Αἰγυπτίος]...τῶν χρημάτων ἔξωθεν τῇ Ῥώμῃ σίτον μηνῶν τεσσάρων; 2.383: [ἐτήσιοι καρποί]...οἱ μῆσιν ὀκτῶ τὸ κατὰ τὴν Ῥώμην πλῆθος τρέφουσιν.

138. North African agricultural productivity grew substantially beginning under Nero (*r.* Oct. 54–11 June 68): Jaïdi 2003: 91.

139. Including, *inter alia*, the significance of these four- and eight-month figures, which some scholars have assumed are valid for grain destined for the capital's *canon frumentarius*, and others, the totality of Roman grain imports from one region or the other. For the terms of debate, see, Corbier 1987: 412–422; Lo Cascio 1997: 37–38; Sirks 1991: 218; Virlouvet 1995.

140. Vera 1997–1998: 40–45 makes a persuasive case for responding in the negative.

141. I.e., contra the work's own insistence that it was composed during the reigns of Diocletian and Constantine I. The argument for a later date—and, once again contra statements made in the *Historia*, that it was the work of an individual, rather than six putative "scriptores"—originated with Dessau 1889, was refined in Syme 1968; Syme 1971; Syme 1983, and is by now largely accepted.

142. Prudentius: *contra Symm.* 2.937–947; Salvian: *de Gub. Dei* 6.68, in which the measure of a conflict's seriousness is that it was even felt in Sicily and Sardinia, "id est fiscalibus horreis"; SHA: *Gallieni duo* 4.9. The description of a putative outbreak of banditry occurring in 261 is introduced with the faintly bemused "etiam in Sicilia". More than one of our authors was surprised that anything should occur to disturb the Sicilian idyll. (On which trope, see Section II.2.2.3).

in Ammianus Marcellinus, in whose *Res gestae* (ed. c. 391) Sicily barely figures,<sup>143</sup> and in Paulus Orosius, whose *History against the pagans* (ed. 417/418) is much more interested in Sicily's pre-Christian past than in contemporaneous events.<sup>144</sup>

Such notices are "incidental", in the sense that they are typically to be found in works which are not actually *about* Sicily. The fact that most such incidental notices are of limited historical value, however, does not mean that they all are. There are a select few works within which a smattering of data relevant to Sicily's history may be found. Two such sources are especially important, since they shed some light on a subject concerning which the texts otherwise have little to say. Appropriately enough, in this light, one is not properly a "text" at all. The *Tabula Peutingeriana*, which dates to the middle of the fourth century, is the only Roman *itinerarium pictum*, or illustrated itinerary, known to have survived. It is, at the risk of oversimplification, a graphic representation of the routes employed for overland transport in the Roman Mediterranean (Fig. 2).

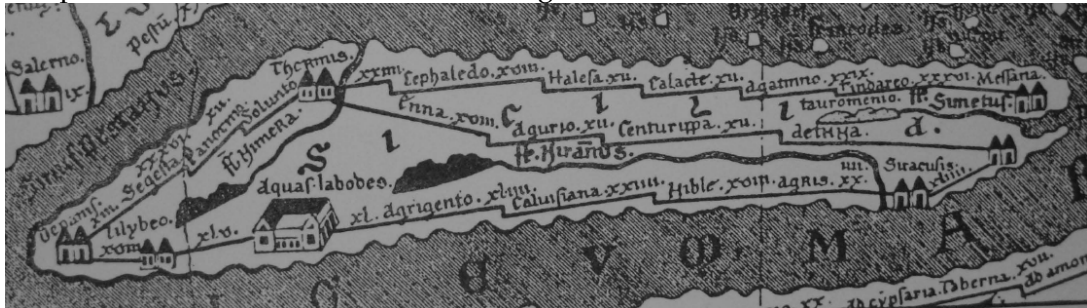


Fig. 2: Tabula Peutingeriana, detail of Sicily.

The *Antonine Itinerary*, which includes material from the last quarter of the third–first quarter of the fourth century, conveys the same sort of information, but does so with words instead of images. Both sources include a description of Sicily's several itineraries, concerning the details of which they are largely in agreement.<sup>145</sup> At minimum, the consistency of detail apparent in a comparison of the *Tabula* and the *Antonine Itinerary* is a powerful argument for their value as a record of established (if not habitual) patterns of movement within the island. The value of such information, I contend, has yet to be fully understood.<sup>146</sup>

Finally, it is worth acknowledging the existence, if not always the historiographical value, of the hagiographic literature, one example of which was

143. That said, it is mentioned for a surprising reason, given the prevailing emphasis on tranquility: Amm. Marc. 21.7.5. tells of the stationing of troops along the island's southern coast.

144. In which imbalance, it should be said, Orosius is not alone. Caruso 1991 collects the (sensu stricto) historical sources of fourth century and later date in which mention of Sicily is made, and in many instances, the Classical past is the exclusive object of interest. I consider this phenomenon in Section II.2.2.3.

145. To take an example relevant to the area of interest, all twelve of the stages on the *Tabula*'s northern coastal itinerary also appear, in the same order, on the *Itinerary*'s analogous route ("Item a Lilybeo per maritima loca Tindaridem"; 90.6–93.1). The *Itinerary* differs principally for its inclusion of a further three intermediate stages. It also appears to be a little bit longer—244 m.p. rather than the *Tabula*'s 222—but this is very possibly an artifact of textual corruption (Uggeri 2004: 154) or simply of the variable length of the Roman mile.

146. Its proper treatment is, unfortunately, too large a problem for this thesis as currently formulated. For a sense of the possibilities, however, see Chapter 6, Section V.3.

mentioned in Section II.1.3. The *Life* of Melania the Younger includes an episode which we have already considered, namely, the titular saint's sojourn in Sicily.<sup>147</sup> Details concerning her estates on the island—offered, presumably, to emphasize the significance of the wealth she so piously renounced—suggest the scale of contemporary senatorial land ownership.<sup>148</sup> The text, in other words, is of some use as a historical source.

Happily, its (limited) verisimilitude is a feature of which other Sicilian hagiographies are not entirely bereft. The *Passio* of Saint Euplius (d. c. 304) sees its eponym suffer at the hands of the island's provincial governor, whom the oldest text calls Καλβησιανὸς ὁ λαμπρότατος κορρέκτωρ. The governor's title and rank are both appropriate for the period in which Euplius' martyrdom is thought to have transpired,<sup>149</sup> and his name is potentially of even greater interest. As Uggeri has argued,<sup>150</sup> it is possible that this was the aristocrat behind the putative *massa Calvisiana* which is mentioned in both the *Antonine Itinerary* (89.6, 95.7) and the *Tabula Peutingeriana* (see above). If the identity is valid, then the *floruit* of Euplius' λαμπρότατος κορρέκτωρ provides us with a means of dating the place to which his name is attached (and furthermore suggests a *terminus post quem* for at least this section of both sources). These cases go some distance toward undermining the view, expressed *inter alios* by Pricoco, that it is impossible to recover "il quadro storico della prima santità siciliana".<sup>151</sup>

Unfortunately, however, they do not suffice to refute it completely. Scholarly confidence in the plausibility of details from Melania's *Life* and Euplius' *Passio* is to an important degree conditioned by the availability of *other* documentary evidence against which to read the hagiography. The resonance between Euplius' *Passio* and two important fourth century *itineraria* has already been mentioned. The life of Melania, as both historical figure and Christian exemplar, is even better documented, in at least one instance by a source—Palladius of Galatia's (363/364-c. 425) *Historia Lausiaca* (61)—of explicitly historical character.<sup>152</sup> The great majority of Sicilian hagiographies, on the other hand, do not benefit from this sort of intertextual support. Indeed, they *cannot*, since one of the most frequent attributes of such literature is a lack of "contextual" detail susceptible to serve as a hook for such comparison.<sup>153</sup> The reasons for this lack are multiple, and I discuss some of them in Section II.2.2.3. One, however, is worth mooting here. With very few exceptions—

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147. See p. 19.

148. Or, if one is inclined to be skeptical, the scale which might seem plausible to a basically contemporary audience, which for our purposes comes to basically the same thing. The text upon which the extant Greek and Latin recensions were based was probably composed around the time of the Council of Calcedonia, held in 451: D'Alès 1906.

149. Viz., after the tetrarchic reorganization of the provinces (see p. 17), when it was established that Sicily would be administered by a *corrector*, and before the 320s, when the office was given to a *consularis*.

150. Uggeri 2004: 38.

151. Pricoco 1989: 327.

152. Interestingly, the author knew Melania and her husband personally, having stayed with them during sojourn in Rome.

153. Such detail, Motta (Motta 2004: 45) argues, was largely superfluous to the didactic and/or exemplary aims of the literature in question, and tended not to be preserved.

Euplius' *Passio* and Melania's *Life*, not coincidentally, are chief among them<sup>154</sup>—the earliest Sicilian hagiographies are preserved in texts which were the product of a lengthy process of transmission. After a hundred years and multiple recensions, we should not be surprised to see the details get a little bit vague, when not also infused with realia contemporary with (each?) redaction of the text. Sources like the *Life* of Melania—which, it is worth recalling, is after all a fifth century text<sup>155</sup>—are the exception, not the rule.

As it happens, the date of Melania's *Life* is significant for other reasons. Beginning in the fifth and especially the sixth century, textual resources once again multiply in number. Given the relative paucity of sources dating to the tetrarchic and Constantinian periods, it is unsurprising that scholars have so frequently attempted to read these texts back into the documentary vacuum of the third and especially fourth centuries. For all that it is understandable, however, it remains in some respects a problematic enterprise—albeit not primarily for the reasons one might expect. With the notable exception of the *Notitia Dignitatum*, some of our most important fifth and sixth century sources are of a fundamentally different sort than those which came before.

The problem is basically one of scope. The most detailed insights we have emerge from a genre in which the bigger picture is difficult to appreciate: that of personal correspondence.<sup>156</sup> Here, as already mentioned, are the mid-fifth century letters exchanged by Lauricius with the *conductores* of his Sicilian properties; the sixth century letters written by Cassiodorus and collected in his *Epistolae variae*; and, most importantly, the correspondence of Gregory the Great, who in his capacity as pope (r. 590–604) maintained regular contact with a variety of interlocutors in Sicily. In particular, Gregory's frequent interventions in the administration of the Roman Church's Sicilian patrimony are an important source of information concerning the running of what was by the time of his papacy an extensive complex of estates.<sup>157</sup> But as in the case of Lauricius, it rarely clear to what degree such practices as may be glimpsed in his correspondence were standard. Some—concerning, especially, the relationships between absentee landowners and their local agents—are familiar from earlier sources. Nevertheless, we ought to be at least a little skeptical of the (prevailing) impression of institutional continuity. Lauricius and his fellow epistolators wrote, it is true, from within the systems of land management and tenure they have typically been used to describe. But they did so with a series of quite specific purposes in mind,<sup>158</sup> as for example when Gregory (*Ep.* 1.70) summons

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154. The date of the former cannot be established with exactitude, but it is at least in part an early fourth century text. The most useful evidence, in this regard, is the title of Euplius' antagonist: see n. 149.

155. See n. 148.

156. See, for further remarks concerning the challenges posed by the use of letters as a historical source, the discussion on p. 43.

157. Enough so that, by 592, Roman Church property was administered by not one but two *rectores*, the senior based at Syracuse, and the junior at Palermo: Rizzo 2002: 126, n. 41. The limited quantitative data we have available on the papal patrimony reinforce the impression of territorial and economic significance. By the turn of the seventh century, Cracco Ruggini 1980: 13 indicates, "si calcola che la sola Chiesa Romana disponesse in Sicilia di circa 3.200.000 iugeri, cioè 800.000 ettari, suddivisi fra 400 grandi affittuari e approssimativamente 250 famiglie coloniche per ogni affittuario".

158. Cf. Edwards 2005: 270: "Letters involve writing for a specific occasion; they are the product of

to account a group of bishops suspected of corruption in their administration of the Sicilian church. Moreover, and more importantly, they did so primarily when these systems *failed* to function: when they worked properly, epistolary intervention was unnecessary. What insights we glean from such texts into the socioeconomic and political milieus in which they were produced—and *a fortiori* the ways in which they differed from earlier conditions, concerning which we are better informed—we do so despite their authors' intentions.

The same cannot be said for the second set of texts available to us beginning in the sixth century. Procopius' *On the Wars* is the first of these works and in many respects emblematic. The author's purpose, as mentioned above,<sup>159</sup> is to document the wars of the eastern Roman emperor Justinian in the west. The scope of the work, like the campaigns which are its subject, is best described as "imperial",<sup>160</sup> and as such, it is primarily concerned with large-scale phenomena which are usually absent from the letters just considered. Indeed, it is to Procopius' zeal for exposition—specifically, of Justinian's pretext for war—that we owe our knowledge of the strife which characterized the western Mediterranean's final "Roman" century. His account of the fifth-century struggle between Vandalic, western Roman, and Ostrogothic factions is necessary background to the Vandalic insult<sup>161</sup> which ostensibly motivated Justinian to intervene in the affairs of the west. More pertinently, for our purposes, it also serves to establish a context for the renovation of Sicily's political importance. The *Wars* explains (and simultaneously ratifies) Sicily's renewed significance to imperial history, but it is the latter—that is, imperial history—which is its true subject.

Fortunately for us, and less fortunately for the island's inhabitants, developments in the seventh, eighth, and ninth centuries often worked to maintain the intersection of Sicilian and imperial history. In consequence, the island also continued to appear in imperial historiography. After Procopius, however, we are not so lucky as to have sources contemporary with the events they describe. The textual evidence for Constans II's "Sicilian expedition" is exemplary. As is true for seventh century events in general, virtually all the relevant primary sources postdate the events of Constans' life, the most significant by a century or more. Nikephoros' *Breviary*, Paul the Deacon's *Historia Langobardorum*, and Theophanes' *Chronography* were all written in the last quarter of the eighth or the early part of the ninth century.<sup>162</sup> The fact of such distance between writer and object, as we have already

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particular circumstances."

159. See discussion beginning on p. 24.

160. A theme developed in Section II.2.2.1. Notwithstanding Procopius' later disillusionment with the emperor—as documented in his impressively-vituperative *Ανέκδοτα* (conventionally the *Secret History*)—the historian's support for Justinian's enterprise is clear in the *Wars*.

161. I.e., the removal of Hilderic from the throne, as recounted above: see p. 25.

162. Exceptions are few. The *Vita* of Pope Vitalian (*LP* 78), which contains a concise account of Constans' Roman sojourn en route to Sicily, may have been the work of a near contemporary: Corsi 1983: 49. The earliest source which we are able to securely date is Bede's *De temporum ratione*, which was composed c. 725. Its treatment, however, is less detailed than those of the later sources just mentioned. The *Breviary* (properly *Ἱστορία σύντομος*) was probably written between 775-787; the *Historia Langobardorum*, between 787-796; and the *Χρονογραφία*, sometime after 813. For a discussion of all the relevant *testimonia*, see Corsi 1983: 16-30, 52-59.



observed apropos of the sources on Augustan Sicily, is often sufficient motive to suspect the accuracy of a historian's information, and indeed there is clear evidence of confusion in some details of Theophanes' narrative. His account of the confiscation of the Roman Church's Sicilian estates (to cite a passage we have already had cause to consider) is muddled, *inter alia*, by the author's conflation of popes Gregory II (r. 715-731) and Gregory III (r. 731-741).<sup>163</sup> Theophanes does not only make factual errors, however. His use of thematic administrative terminology is appropriate to the early ninth-century moment in which he wrote, but anachronistic for the seventh and eighth centuries reality he means to describe. Modern scholars were slow to perceive the prolepsis, and as a result, Byzantine thematic reform—including, more specifically, the constitution of the Sicilian theme—was long thought to have occurred before it probably did.<sup>164</sup>

For the eighth and ninth centuries, Nikephoros and Theophanes are naturally more credible. Unfortunately, however, neither has much to say concerning the island then; as Maurici has observed, "[l]e fonti storiche difettano...per l'VIII secolo e per gli inizi del IX".<sup>165</sup> In any event, neither lived long enough to witness (let alone document) the most important development of Sicily's ninth century. Our information concerning the Muslim conquest of the island, which began several years after Theophanes' death in 817, is mostly from sources which, once again, postdate the events they describe. The story of Euphemius' ill-fated alliance with the Aglabids—which, as we have already observed,<sup>166</sup> provided them with the opportunity Islamic rulers had long sought to wrest control of Sicily from Constantinople—is among the latest notices we have concerning the island during this thesis' period of interest. It comes to us via the first of the four anonymous *Scriptores post Theophanem*, whose continuation of the latter's *Chronography* is (cumulatively) a work of the mid-tenth century.<sup>167</sup> By then, of course, Sicily's conquest was essentially a *fait accompli*.

For information concerning its earlier progress, meanwhile, we are obliged to turn to the Arabic sources. These, at least, are easy enough to consult, owing to their compilation (and subsequent translation, into Italian) by Michele Amari.<sup>168</sup> That they are accessible, however, does not mean they are unproblematic. Indeed, the most important Arabic sources are deficient in ways with which we are lamentably familiar. First, they are almost all late. There are, at present, no extant sources—either for Sicily or even Muslim North Africa, which is relatively much better-

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163. Zuckerman 2005: 85-94 discusses the problems—of interpretation, chronology, and even detail—posed by this passage.

164. Brubaker & Haldon 2011: 744-755 quite persuasively argue that the constitution of the "theme system" was, in fact, a phenomenon of the first few decades of the ninth century.

165. Maurici 2005: 46.

166. See p. 30.

167. The oldest—indeed, only—extant manuscript is actually of eleventh century date. The sections attributed to the first continuator cover the period between 813-867, but on the basis of the prefatory dedication—to Constantine VII (r. 913-959)—were composed sometime around the middle of the tenth century.

168. Viz., in *BAS* and *AppBAS* 1-2: Amari 1997. Discoveries made since the compilation of the *BAS* have added a few texts to Amari's corpus; Chiarelli 2011: xxxi-xxxii mentions several which he himself located.

documented—which date to the ninth century.<sup>169</sup> Tenth-century texts, which comprise a handful of works produced in Fāṭimid North Africa as well as the anonymous Arabo-sicilian *Cambridge Chronicle* (on which more momentarily), are only a little more numerous.<sup>170</sup> In other words, there are essentially no testimonia contemporary with the period of Sicily's conquest. The texts which are most informative concerning the period of interest to this thesis, in fact, are products of the thirteenth and even the fourteenth century, and their sources are often obscure.<sup>171</sup> The most valuable—in any event, the most extensive—are Ibn al-Aṭīr's *Kāmil al-tawārīḥ*<sup>172</sup> (BAS 214-316), Ibn Ḥaldūn's *Kitāb al-ʿibar* (BAS 460-509), and al-Nuwayrī's *Nihāyat al-ʿarab* (BAS 423-459). The *Kāmil al-tawārīḥ*, which was composed c. 1231, details events in Sicily from before the period of conquest up to the reign of Frederick II (r. 1220-1250). As such, it is earlier than both the *Kitāb al-ʿibar* and the *Nihāyat al-ʿarab*, which were composed in 1377 and 1321, respectively. Ibn Ḥaldūn's narrative, which is shorter and less detailed than that provided by his predecessor, is nevertheless useful as a supplement to Ibn al-Aṭīr's. So, too, is the *Kitāb al-ʿibar*, the relevant sections of which are for the most part based on the *Kāmil al-tawārīḥ*.<sup>173</sup>

Despite their substantial overlap, these sources disagree on important details of the early history of Muslim Sicily.<sup>174</sup> Such imprecision is, in part, a result of their date, but it is also a consequence of their center(s) of interest. With the exception of the *Cambridge Chronicle*—an annalistic account of events between 812-964 and, according to Amari, the work of a Greek Sicilian functionary of the Kalbid court<sup>175</sup>—none of the usual sources are concerned with Sicily *per se*. Notwithstanding the old familiar advantages which accrued to whomever could control it, the island was in many respects a marginal part of the *Dār al-Islām*. The latter, in its political, historical, and geographic aspects, was the real subject of the writers on whom we depend. As a result, the island is only occasionally, and then often superficially, discussed.<sup>176</sup> In this respect, the Arabic sources resemble the Latin and Greek works

169. See, for a discussion of this and other problems associated with the historiography of Muslim North Africa, Wansbrough 1969.

170. As enumerated by Chiarelli 2011: xxvii–xxix.

171. Among those which *are* known is a twelfth-century history of Ibn Šaddād (d. 1186), the text of of which is unfortunately lost. (It is a measure of just how late our sources are that even *their* sources postdate the conquest by some three hundred years.) With respect to those which are unknown, the existence of the *Cambridge Chronicle* means that we cannot discount the possibility that some may have been (Arabo-)Sicilian works. Indeed, extant Arabic sources allude to eleventh-century histories produced by Ibn al-Qaṭṭāʿ, Abū Zayd al-Ġumārī, and al-Ḥasan ibn Yaḥyā, all evidently Sicilian. Like Ibn Šaddād, however, their works are lost, and the manner of their reception and use is mostly unclear.

172. More typically *Al-Kāmil fī al-tārīḥ*. The title as given above is less common, but it is the form employed by Amari in the BAS. Inasmuch as this is the text I have employed, I follow his example.

173. Other names could of course be given. Ibn ʿIdārī, whose *Kitāb al-bayān al-muġrib* (BAS 352-375) chronicles the history of Muslim Spain and North Africa, includes a range of notices concerning Sicily, but his primary value is as an explicator of Muslim regional dynamics. The remainder make similarly modest contributions. For a fuller consideration of the corpus, see the discussion in Chiarelli 2011: xxvii–xxxii.

174. E.g., concerning the size and character of the invading force: a debate to which I have already made reference (see n. 129).

175. Amari 1933-1939 vol. 1:66.

176. The section devoted to Sicily in al-Idrīsī's (1099-1161) *Nuzhat al-muštāq* (BAS 14-74), a geographical

which immediately preceded them. There are important differences between the Arab and (*sensu lato*) Roman historiographic traditions, but among the things they have in common is their cursory treatment of Sicily during the period of this thesis' interest.

## 2.2. The limits of discussion.

Obviously, the fact of these many lacunae has not acted to prevent the writing of Sicilian history. (The synthesis in Section II.1, which is after a fashion my own contribution to the genre, should suffice to demonstrate scholars' continuing bad sense.<sup>177</sup>) What it *has* done, however, is shape the sorts of histories which may be written on the basis of the texts. The relative prominence of certain themes—or, put differently, the consistently greater attention paid to certain aspects of Sicilian history—is not primarily a result of decisions I have made. (The obvious exception, of course, being Sicilian Christianity, discussed above.<sup>178</sup>) Rather, it reflects a series of emphases which are present in the sources themselves. Cumulatively, they allow for the fuller treatment of certain subjects while limiting what we can say about others.

Briefly stated, the emphases which we observe in the textual corpus are the result of several factors. One of these is common to virtually all ancient literature, and should be raised at the outset. The ability, as often the leisure, to write was a privilege which belonged overwhelmingly to the upper strata of Roman (and for that matter Islamic) society.<sup>179</sup> It is not *only* the wealthy who appear in the works under discussion—recall the multitudinous slaves of Diodorus' Republican-period revolts—but they are inevitably at the center of the frame. In consequence, it is their interests which predominate in the texts available to historians of Roman Sicily. The texts, meanwhile, encompass a limited range of literary forms, the characteristics of which differed in a variety of ways. The intersection of elite interests and generic limitations played an important role in determining what our sources can tell us.

### 2.2.1. The imperial gaze.

Beginning with Diodorus' *Historical Library*—that is, during the earliest phase of writing on Roman Sicily—a not-inconsiderable number of the sources may be characterized as works of "universalizing" history. By this I do not mean that they are necessarily works of *universal* history, which constitutes a particular sort of historiography to which only some of our sources belong,<sup>180</sup> but rather that they

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encyclopedia commissioned by al-Idrīsī's patron Roger II of Sicily (22 Dec. 1095 – 26 Feb. 1154) c. 1138, may constitute a sort of exception to the rule. This is not, however, because it is especially detailed; indeed, its schematic treatment of the island is atypical of the geographer, who frequently provides ethnographic information which is conspicuously absent from his discussion of Sicily. Rather, the difference lies in his *motivation*. As Chiarelli 1980 has argued, the publication of any evidence for ethno-religious conflict might have constituted a political and perhaps even military liability for his Norman patron, and so it was consequently suppressed.

177. Others, recently, include Correnti 1999.

178. See p. 30.

179. Concerning patterns of ancient literacy, Harris 1989 is basic. A more detailed discussion of *our* authors' uniformly comfortable circumstances follows in Section II.2.2.1.

180. Diodorus is one. Another is Ibn al-Aṭīr's *Kāmil al-tawārīḫ* (see n. 172), which covers the ancient history of Greece and Rome as well as the civilizations of his time.

share a certain (ambitious, but nonetheless definite) scope. Diodorus Siculus; Cassius Dio; Procopius; and Theophanes (to take a historical cross-section) wrote in different languages, with different sympathies, and for different reasons, but they did so from a position of concern with the same notional space. Their "inhabited world"—the *oikoumene*, an originally Greek term whose use was current throughout the whole period of interest to this thesis—was defined by Roman experience. More specifically, it was defined by the fact of Roman conquest and subsequent control, and as such, constituted a *political* as well as a geographical space.<sup>181</sup>

*Mutatis mutandis*, the same can be said of the Arab writers on whom we depend for notices concerning the last phase of Late Antique Sicilian history. The *Dār al-Islām*, as is clear in the term itself, was the "abode" of the Muslim faith, but more than religion was at issue. The early history of Islam—and more pertinently its expansion throughout the Mediterranean basin, into areas which it frequently had to wrest from (as-frequently-belligerent) Christian Roman rivals—was in many respects the history of an empire. To be sure, tensions among Muḥammad's faithful, which soon exploded into factional conflicts of the sort which were typical of Muslim Sicily, had by the time of the island's conquest already shattered the political unity of that empire. But the lines drawn between the Idrīsid, Aḡlabid, and Iḥšīdid dynasties of ninth-tenth North Africa were not as bright as the line which divided the *Dār al-Islām* from the *Dār al-Ḥarb*, or "abode of war". The latter, basically, was the world in which Islam did not (yet) predominate.<sup>182</sup> In the Mediterranean, that world was practically coterminous with the Roman empire and the polities descended from it (with which Muslim powers were indeed often at war). Thus constituted, the dichotomy had secular as well as religious ramifications. One of them was the reality of the *Dār al-Islām* as a political space. Another was the fact that this space was always adjacent to, and sometimes overlapped with, to the geographical space of the *oikoumene*.

It was this shared political space which determined the scale, and often the subject, of the universalizing histories to which I earlier made reference, and its salience influenced their composition in ways which are relevant to their use as sources on Late Antique Sicily. One of these I have already raised as a problem of coverage, namely the rarity of historians' treatment of Sicily as a subject of more than incidental (and even then superficial) discussion. From a purely pragmatic standpoint, it would be unrealistic to expect authors of universalizing history to do much more. So great is the range of subjects within their purview that, absent some deeply compelling reason to do otherwise, they are apt to limit the discussion of *any* single topic—or region, in the present case—to the essentials.

What, then, was "essential" about Sicily? The range of answers given by authors of universalizing history was as narrow as their remit was wide. Far from being a paradox, this "inverse proportionality" was to some degree inevitable. The implicitly political frame adopted by universalizing historians imposed a particular sort of logic on their narratives. Among other things, it worked to produce a concentration of the historian's attention on those aspects of a topic which were most

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181. Humphries 2009: 97–98.

182. Abel 2012.

relevant to the constitution—or maintenance, or rupture—of the political space concerning which they wrote. An interest in the first and third themes, for example, is behind the repeated appearance of Sicily in moments of military conflict. The island's third-century BCE contestation by the infant Roman and Carthaginian empires guaranteed it an important place in any—we can be more specific: Diodorus Siculus'—history of Rome's transformation into an international power. Similar considerations determined Sicily's relative prominence in Procopius' account of Belisarius' campaigns, which, from the perspective of a historian sympathetic to Justinian's characterization of his western conquests as a "*renovatio imperii*", represented the reintegration of a space once united (in terms of identity as much as geography) by "Our Sea". And, finally, mention of the island in the Arab sources comes in the context of its excision from the Byzantine empire and incorporation into the *Dār al-Islām*.

Grosso modo, it seems safe to say that Sicily is most visible in the universalizing historiography when circumstances were such that its (always potentially advantageous) location became one of strategic value. As we have already seen, however, not every mention of Sicily is necessarily one of imperial instability. The island was possessed of other attributes which rendered it an occasional subject of interest. Unlike the question of its strategic significance, which was to a large degree the consequence of processes which were exogenous to the island, the latter were properly Sicilian characteristics. Probably the most important of these was the island's fertility, which, as implied by Cicero's use of an apposite Catonian aphorism,<sup>183</sup> was common knowledge by the time the orator dilated upon the subject in 70 BCE. The way the aphorism is framed is revealing, however. Far from being a subject of idle interest, the fecundity of Sicilian fields was significant for fitting the island to the service of Rome and its people. That Sicily's productivity was intrinsic and (more or less) stable, and its strategic value, extrinsic and (more or less) punctual,<sup>184</sup> is orthogonal to the fact that both qualities were appreciated in similarly instrumental terms. To the degree that it is possible to generalize, the universalizing historians' "gaze" was attracted to the same phenomena, and usually for the same reasons, as the gaze of the politically powerful.

Needless to say, this was no accident. Indeed, it was an all-but-inevitable feature of the form. Universalizing historiography, by virtue of its acceptance of a supra-regional political space as a legitimate unit of analysis, necessarily took on board the (imperial) logic which explained, or perhaps more accurately justified, the coherence of that space. But it had as much to do with the fact that our universalizing historians (in fact basically all our authors) *were* the politically powerful. This is a phenomenon to which I have already alluded, in my discussion of the social ramifications of ancient literacy, but it is worth illustrating here. The pose adopted by Cicero in the *Verrines*—of outrage at the erstwhile provincial governor whom he condemned and sympathy with the Sicilians who had suffered that governor's abuses of power—was rhetorically effective but substantially misleading. In his role

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183. See n. 39.

184. Of course, a period of drawn-out warfare—as, pertinently, occurred during the Arab conquest of the island—might act to maintain Sicily's strategic significance, at least in the medium term.

as *quaestor* of western Sicily in 75 BCE, Cicero had been, if less corrupt than Verres, no less complicit in the imperial system responsible for the island's subjugation. The success of his suit, furthermore, did less to shake the system of which they both were part and more to improve Cicero's place within it.

We are singularly ill-informed concerning Diodorus Siculus' circumstances (though they are not likely to have been modest<sup>185</sup>), and in consequence cannot assert that he was ever involved in Roman politics; but if he was not, he was the sole exception to the rule. Appian and Cassius Dio were, respectively, of equestrian and senatorial rank by birth, and both held a range of imperial offices.<sup>186</sup> Procopius' early life is a subject concerning which we know little, but he evidently received the sort of elite education which was required to serve as Belisarius' *adsector*, or legal advisor, beginning in 527. In any event, we have already observed that he wrote from a position of sympathy for both Belisarius and Belisarius' patron, Justinian. Nikephoros and Theophanes, respectively the patriarch of Constantinople and the founder of the monastery of Megas Agros on Mount Sigriane, were members of the ecclesiastical rather than the secular aristocracy, which is to say much the same thing, during a period when the former was composed almost entirely of members of the latter.<sup>187</sup> Even the Arab historians, for all that they belonged to a different society, occupied equally exalted places within it.<sup>188</sup> In one way or another, our authors were beneficiaries of the political system(s) whose existence underpinned the writing—indeed the conception—of universalizing history as I have defined it here, and as such, they had already internalized its foundational assumptions.

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185. Regarding his origins, Diodorus tells us only that he was born at Agyrium (modern Agira), Sicily (1.4.4). He also says, however, that he traveled widely for research (1.4.1), which would seem to imply that he was not without means (notwithstanding the probability that he rather exaggerates the extent of his travels: Oldfather 1933). And whether or not his *family* was well-known, he certainly came to be. In an entry pertaining to the year 49 BCE, Jerome (*Chron.* 237i) reports that Diodorus "habetur clarus". Oldfather (Oldfather 1933) takes this to mean that he achieved a measure of fame, presumably for the publication of his history.

186. Appian filled a variety of offices in Alexandria, the province of his birth, before going to Rome to practice law in 120. Probably owing to the intercession of important friends, he was there appointed to the office of procurator: White 1912. Cassius Dio, who was born to a prominent family from Nicaea, Bithynia, held an even greater range of offices. He was a praetor in 194; a suffect consul c. 204; and, between 218–228, successively curator of Pergamum and Smyrna, proconsul of Africa, and legate of Dalmatia and Upper Pannonia. At the time of his retirement in 229, he held an ordinary consulship alongside the Emperor Severus Alexander: Rich 2005.

187. Indeed, neither came from penurious circumstances. Nikephoros was the son of an ἀσηκρήτης, or imperial secretary, and began his public career in the same role. Thereafter, he was appointed director of "the largest poorhouse" in Constantinople (c. 802) before finally becoming patriarch: Kazhdan 2005a. Theophanes, meanwhile, was the son of a στρογγύλος, and before taking monastic orders, he served as a στρογγύλος, or groom, at the court of Leo IV: Kazhdan 2005b.

188. Ibn al-Aṭīr (1160–1233)—in full, Abu al-Ḥassan ʿAli ibn Muḥammad ibn Muḥammad al-Šaybanī—was a member of the wealthy and influential tribe of the Banū Bakr. Al-Nuwayrī (Šihāb al-Dīn Aḥmad bin ʿAbd al-Wahhāb al-Nuwayrī; 1272–1332) was, besides a historian, a civil servant in Mamluk Egypt, where he came to know, and enjoy the good opinion of, the ninth Mamluk sultan, Al-Nāṣir Muḥammad. Ibn Ḥaldūn, concerning whom we know the most, was the most illustrious of the three. As the scion of a wealthy Andalusian family, the Banū Ḥaldūn, he received a full classical Islamic education. In addition to writing, he held a number of political offices in Muslim North Africa, the Naṣrid kingdom of Granada, and, in his later years, Egypt.

### 2.2.2. Land and the gentry.

Our authors' rarified status did more than facilitate their adoption of the imperial gaze. It also ensured them a level of wealth which, though notably variable,<sup>189</sup> far exceeded that of the less fortunate. At least for the period of Roman domination, during which the acquisition of land was at once the most acceptable and (for that reason among others) the most usual end to which such wealth could be put, our authors were concomitantly likelier to be large-scale landowners. Under the circumstances, it is unsurprising that that as a group they should have taken a particular interest in what was, after all, an important feature of Roman Sicilian history. This interest is best reflected in the epistles considered in Section II.1.3. There, the letters in question served to illustrate the frequent employ of indigenous *conductores* on the Sicilian estates of Rome's aristocracy, who were only sporadically in residence on the island. Here, meanwhile, I mean to consider them in somewhat more detail, since they are equally revealing of other aspects of Sicilian landowning.

As a point of departure, it is worth noting that the very existence of such correspondence (of which, undoubtedly, many similar examples have been lost) speaks to an authorial interest which was not merely academic and general. It was economic and specific, the latter to the extent that it is not usually the estate which is the subject of discussion, but rather some aspect of its management or finances.<sup>190</sup> In light of the potential productivity of Sicilian land, and a tax regime which (if Vera is correct) magnified the profitability of Sicilian produce, such vivid interest is perfectly comprehensible.

From the historian's perspective, however, it is also pretty fraught. At issue is the uncertain (and probably variable) degree to which these letters' details should be seen as "representative". One aspect of this problematic has already been considered.<sup>191</sup> The difficulties inherent in attempting to integrate punctual documents into a systemic description of large-scale land-holding on Sicily are, I have argued, a problem of coverage, since the much-reduced scope of the epistolators' interest, relative to that of the historians upon whom we depend for information concerning Sicilian landholding during both earlier and later periods of the island's history, undermines the cogency of the narrative emergent from the textual corpus. But there are other motives for caution, most of which result from peculiarities of the epistle *qua* literary form.

Like the "universalizing" histories discussed above, ancient letters are too variable to really constitute a *genre*.<sup>192</sup> The early (second century BCE) appearance of

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189. Even amongst the very rich. Olympiodoros of Thebes, writing in the fifth century, attests (*FHG* 4, fr. 44) to a massive gap between the income of the wealthiest families (4000 pounds of gold per year) and the class immediately below them (1000–1500 lbs per annum).

190. *Greg. Reg. ep.* 1.42 comprises a veritable catalog of such concerns, including, by way of example, the regulation of marriage taxes assessed on tenants. Gregory orders that this tax be capped at 1 *solidus*—and if the couple are poor, "etiam minus dare debent".

191. See pp. 35–36.

192. Thus, most famously, Derrida 1980: 48: "[l]a lettre, l'épître...n'est pas un genre mais tous les genres, la littérature même". My remarks on ancient epistolography are limited by concerns of space and relevance to the subject of this section. For an introduction to the subject, see Edwards 2005 and, more recently still, the contributions to Morello & Morrison 2007.

texts like "Plato's" letters, in which the epistolary form is simply a literary conceit,<sup>193</sup> is eloquent testimony to the variety which it encompassed. Even those letters which were *intended* as such are not much less variable. Among the ways in which they differed was in respect of their authors' conception of their audience. Notwithstanding the fact that, for example, his letters were eventually published, Cicero does not appear to have been writing for posterity. His letters, Edwards notes, "are full of allusions and references that need explication if they are to be understood by later readers".<sup>194</sup> The Younger Pliny's correspondence, meanwhile, is replete with such explanations, the purpose of which was to ensure its comprehensibility to the wider audience which he ultimately sought.<sup>195</sup>

Of the epistolators upon whom we depend, only one—Lauricius, whose correspondence was preserved in the church archive at Ravenna—was never published. More-or-less complete<sup>196</sup> editions of Symmachus, Cassiodorus', and Gregory's letters, meanwhile, were all eventually to see publication. But despite being made available for public consumption (in Cassiodorus' case by the man himself), our sources have more in common with Cicero than Pliny. By this I do not mean that they were *unaware* of their wider audience, of course. But Pliny's expository detail was superfluous to the goals with which our sources wrote. To the degree that Cassiodorus' and *a fortiori* Symmachus' (much less frequent) epistolary treatment of Sicilian landholding sheds any light on the subject, it is basically a happy accident. Symmachus' letters were collected in order to serve as a monument to their author's status, which, at the time of his writing, was constituted i.a. in literary terms.<sup>197</sup> That they typically said very little<sup>198</sup> was less important than the style with which they said it.

The point of the *Variae* was not too dissimilar. Cassiodorus, in a passage (8.13-15) from his preface to books 1–10 of the collection, is forthright concerning his aim to "educate uncultivated men who must be trained for the service of the state in conscious eloquence".<sup>199</sup> His purpose, in other words, was to produce men like himself: men trained to express the "rationality, *ciuilitas*, and culture" of Italy's Ostrogothic masters, not to analyze their policy.<sup>200</sup> The latter aim might have suggested the inclusion of some socio-economically useful detail; the former could in many instances be satisfied by a demonstration of the sort of rhetorical sophistication

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193. A different sort of literary conceit is embodied in the letters Horace composed, in verse, in the *Heroides*. These "epistles", which were ostensibly penned by a variety of legendary figures, are unashamedly fictional. On these and other varieties of epistolary literature, see Edwards 2005.

194. Edwards 2005: 273.

195. Murgia 1985: 196. Pliny, unlike Cicero, undertook the publication of his own correspondence.

196. The collection we have of Gregory's letters is extensive, but not exhaustive. A comprehensive collection apparently did exist, but it was lost in the ninth century: .Martyn 2004: 13.

197. Which characteristic, it is worth noting, distinguished the Roman elite from most contemporary aristocracies: Wickham 2005: 157–158. On the role of this literary culture in the constitution of elite status, see Habinek 1998.

198. "Symmachus' epistles are notoriously wearisome and lacking in content": McGeachy 1949: 227.

199. Thus Barnish's (1992: 2) translation of "deinde quod rudes viros et ad rem publicam conscia facundia praeparandos labor tuus sine aliqua offensione poterit edocere". Barnish follows Traube (*MGH AA XII*: p. 526) in reading "praeparandos" for Mommsen's (8.14) "praeparatos".

200. Corcoran 1993: 288.



which was (still) the preserve of the Roman, as distinguished from the Gothic, elite.<sup>201</sup> Dates, figures, and sometimes even names were beside the point.<sup>202</sup>

Gregory's case is a little different. Among his worldly responsibilities was the administration of the Sicilian *patrimonium Petri*, and his letters on the subject are rife with such detail as his correspondents required for the management of the Church's property. In aggregate, they are sufficient for historians to trace (some of) the parameters of the ecclesiastical estate system on the island, but this is more a consequence of their voluminousness than of Gregory's intent. The latter was self-evidently practical, but it was not merely so. Notwithstanding the fact that the publication of his letters cannot be shown to have occurred before the ninth century, it is clear that the Pope wrote with an eye toward the self which emerges from his correspondence.<sup>203</sup> But the effect at which he aims—to wit, the development of a pious epistolary persona appropriate to his role as Peter's vicar<sup>204</sup>—was not one which required much in the way of supplementary administrative detail, nor that he go out of his way to provide historians with a sense of the context in which the church's estates operated.

Thus, for instance, we remain uninformed concerning the degree to which Sicilian agriculture was actually dominated by the absentee estates which are its best-documented form, and, contrary-wise, to what degree their apparent predominance was simply overdetermined. *Ceteris paribus*, the proprietors of more modest concerns were commensurately likelier to be of modest means, and thus less likely to be writing: without which, of course, they are invisible to the historian. So, too, are native Sicilian owners of even the largest of the island's estates (a class the existence of which is not in doubt<sup>205</sup>), albeit for a different reason. Relative to the Roman imperial aristocracy, they were more frequently closer to—when not actually resident on<sup>206</sup>—their property, and could have disposed of in person matters which the former arranged in writing. In other words, their (relatively more advantageous!) circumstances acted to see them underrepresented in the documentary record, and

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201. Albeit not for long. As Wickham (2005: 257–258) has observed, the sixth–seventh centuries witnessed a “militarization” of elite Roman identity and values. Save for in the Church, the literary culture deployed by aristocrats like Cassiodorus was devalued vis-à-vis military competency—ironically, of the sort which distinguished the Goths, among other Germanic peoples.

202. “Some persons—especially envoys, although these were often high in rank—are referred to not by name, but as X and Y (*illum et illum*). Dates have been removed, save for the occasional internal reference to the tax year...and figures for money and commodities have often disappeared”: Barnish 1992: xviii.

203. Gregory's frequent expressions of concern for the welfare of the church's tenants (as described, for example, in n. 190), it seems to me, were more effective in rhetorical than substantial terms. His exhortations went further in illustrating his compassion for the downtrodden than in effecting any real change in their circumstances. On the publication of Gregory's letters, see the introduction to Martyn 2004.

204. Viz., in addition to the first-order purpose of communication with the correspondent(s) to whom his letters are addressed.

205. As witnessed by the existence of e.g. the *massae Calvisiana*, which appears in both the *Antonine Itinerary* (89.6, 95.7) and the *Tabula Peutingeriana*.

206. That we must countenance the latter possibility does not mean it was very much more than that. The wealthiest of Sicily's aristocrats were predominantly members of the island's curial class (Vera 1997–1998: 63–64), and most probably resided in the cities whence their authority derived.

the relative significance of their properties as a feature of the Sicilian productive landscape, consequently more difficult to value.

If, furthermore, we turn our attention to the Sicilian landscape as a geographical, rather than a productive space, we find that the same sorts of difficulties obtain.<sup>207</sup> Notwithstanding our sources' frequent, if still lamentably inconsistent, specificity concerning measures like productive yield, tenant rents, and tax burden—and a tradition of scholarly efforts to translate such figures into land area<sup>208</sup>—the textual evidence is inadequate to apportion the Sicilian landscape among the sorts of property under discussion. The available data, even when read optimistically, are most informative concerning the extent of Roman and Ravennate ecclesiastical estates; less so concerning senatorial holdings; and basically silent on the subject of Sicilian curial property. And they are, if anything, even less well-suited to an evaluation of the landscape as a *social* space. Our sources are uninformative concerning even patterns of human settlement and circulation. Gregory's letters are in this respect paradigmatic. For all his expressed concern for the welfare of the Church's Sicilian tenants, his interest remains basically abstract. The pope, Rizzo notes, "non fa...riferimento all'esistenza di nuclei abitati e sembra, in generale, riservare poca attenzione alle forme assunte dall'insediamento rurale".<sup>209</sup>

### 2.2.3. The pastoral mirage.

The last of the themes I mean to treat in this section actually encompasses the preceding two, which, after a fashion, might be considered "substantial" in nature. They are concerned, that is, with certain characteristics of the island (*viz.*, its agricultural fertility) or its history (the fact of large-scale absentee landowning). Here, meanwhile, I wish to draw attention to an aspect of Sicilian historiography which might instead be characterized as one of style, or perhaps tone. To wit: the Sicily which emerges from the primary sources is an island which is singularly resistant to change. Indeed, it sometimes seems to stand entirely outside of history.

To be sure, certain of Sicily's characteristics were—are—quite satisfactorily described as stable. Thus, for example, the island's fertility, which is the result of a confluence of felicitous ecological factors, the cumulative effect of which human intervention has not until recently sufficed to really alter. Others, however, cannot be understood independently of Sicily's peculiar Late Antique (or more broadly Roman) history. Among the most persistent are, first, the presentation of the island as a place

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207. Indeed, they may actually be more pronounced. The scale of the largest foreign-owned estates, and the characteristically interregional (because empire-wide) interests of their proprietors, inclined them to a productive regime which was atypically commercial in both conception and aim: Vera 1997-1998). Native Sicilian aristocratic landowners might in principle be similarly ambitious, but their commercial horizons, as indeed their clientelistic obligations, were more usually local. And smallholders—among whom, obviously, native Sicilians predominated—were primarily interested in production for subsistence. (Which, of course, is not to say that they remained uninvolved in market exchange.) At least from the imperial perspective, it is possible that, in terms of production, the large-scale absentee estate was predominant as well as preeminent.

208. As for example Zuckerman's, which we have already had cause to consider: see the discussion on p. 26.

209. Rizzo 2010: 287.

of peace; and second, as a place for—indeed often of, or belonging to—the Roman imperial elite.

Presuming that the narrative in Section II.1 is basically sound, neither postulate can be easily gainsaid. Notwithstanding the possibility of conflict between the island's inhabitants—as seems, for example, to be countenanced by the *Historia Augusta*, in a passage (*Gallieni duo* 4.9) which gestures toward the outbreak of "quasi quoddam servile bellum" in 261<sup>210</sup>—it is true that Sicily was greatly more tranquil than many other parts of the Roman empire. For the nearly five centuries intervening between its conquest by Augustus and the commencement of Vandalic raids c. 440, the island remained mostly<sup>211</sup> unaffected by the power struggles which, whether between members of the Roman aristocracy or between Rome and its neighbors, were the most significant cause of violence during the period. (It was evidently so peaceful, in fact, that save for during a brief moment in the middle of the fourth century, Sicily was never actually garrisoned.)

The second postulate, according to which Sicily was basically a Roman elite playground, seems equally defensible on its face. The defects in the evidence for large-scale landholding by the imperial elite should, I have argued, make us question the degree to which other landowners are underrepresented in the texts. But such concerns do not suffice to eradicate the impression that Sicily "belonged" to the Roman aristocracy. The early first century decree authorizing senators to travel to Sicily without specific imperial permission<sup>212</sup> was, among other things, a tacit recognition of elite habits and interests. (So, too, was the frequency with which they held the island's governorship, at least until Sicily's conquest by Byzantium and probably thereafter.<sup>213</sup>) When the empire was at peace, Sicily was a place to retire for summers of *otium*. And when, as was increasingly the case beginning in the fifth century, the empire faced some new conflict, it became a place of refuge: for Melania and her husband, following Alaric's sack of Rome; for senators menaced by Lombard attacks, both during and after Justinian's Gothic War; and for the elite of Byzantine North Africa, who made for Sicily when Carthage fell to the Muslims.<sup>214</sup>

To note all this, however, is in some respects to miss the point. The accuracy of the island's characterization as "stable", in respect of the phenomena discussed in the preceding paragraph, is evident, but it is not sufficient. We must also consider *why* it was that the stability of a handful of characteristics should have come to serve as (so to speak) a metonymic historiographical shorthand for the whole island. The answer, as I have argued in Sections II.2.2.1–2, is partly to be found in the limited

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210. SHA: *Gallieni duo* 4.9.

211. But see the discussion of Orosius' particularly tendentious brand of historiography, beginning p. 48.

212. Mentioned in Tac. *Ann.* 12.23.1 and Cass. Dio 52.42.6, the latter of whom explains that the prohibition on travel to other provinces had been established by Julius Caesar (*loc. cit.*).

213. Of the 28 governors who served between the end of the third–end of the fifth century (it is difficult to be more specific than this, given the lacunose information to hand), all but one—C. Valerius Apollinaris, whose qualification as *vir perfectissimus* identifies him as an equestrian—were senators: Chastagnol 1963: 369–371.

214. Melania: see n. 67. As is made clear in *CTh.* 7.13.20, dated 8 Feb. 410, they were not the only members of the aristocracy to seek the safety of the island. Lombard attacks: Cf. Rizzo 1997–1998: 82.. Flight from Carthage: Maurici 2005: 46, with references.

range of themes explored by our authors.<sup>215</sup> But our sources' vision of an unchanging Sicily was not simply the result of an inadequately-comprehensive focus. It was also a deliberate effect, as for example in the case of Orosius' *History against the pagans*. The author's purpose, Pinzone explains,<sup>216</sup> was to refute the pagan narrative which lay contemporary Roman woes—most recently, Alaric's sack of Rome—at the feet of the Christians who had abandoned their ancestors' faith. In response, Orosius presented a version of history in which the empire's fortunes had *improved* since the flowering of Christianity. In support of this thesis, he proffers a history of Sicily which is far from even-handed. The *History* is current to about a year before its publication in 417/418, but its treatment of Sicily is most detailed for the island's colonial Greek and Republican Roman period. All this detail is marshaled in the service of an analysis whose tendentiousness Pinzone makes manifest. "[M]essi insieme", he says, Orosius' data

ci forniscono una scheda il cui contenuto è così riassumibile: quando nel passato non soffrì per la malvagità dei tiranni, per le atrocità connesse con le guerre servili o per le catastrofi naturali, la Sicilia dovette sopportare le conseguenze delle lotte di chi ad essa mirava con l'intenzione di farne una sua *praeda*.<sup>217</sup>

The contrast with Orosius' treatment of Sicily during the Imperial period—or rather, following the birth of Christ—is pretty stark. The latter, to be sure, was greatly more tranquil; Orosius does not really differ from our other sources in making this much clear. But it is equally clear, if we compare Orosius' narrative with those of others, that the historian has suppressed a number of events the consideration of which might weaken his thesis. Thus, for example, he is silent concerning Sicily's role as staging ground in the mid-fourth century struggle between emperors Constantius II (*r. Aug.* 337–3 Nov. 361) and Julian (*r. Caes.* 6 Nov. 355–Feb. 360, *Aug.* Feb. 360–26 June 363): an episode which merited the attention of his fellow historian, Ammianus Marcellinus, in one of the few passages (21.7.5) he devotes to contemporary Sicily.<sup>218</sup> Natural disasters are handled in the same way. Orosius' (7.32.5) discussion of the earthquake of 365, which otherwise echoes Jerome's (*Chron.* 326c) depiction of it,<sup>219</sup> makes no mention of its repercussions for Sicily. The latter, meanwhile, is the only affected region Jerome specifically names.<sup>220</sup> The cumulative effect of such editorial

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215. The stability of which, one might furthermore speculate, was *also* in some measure a product of elite interest: but of the political rather than authorial sort. Barring a radical change in the status quo—as produced, for example, by the *pragmatica sanctio* allowing Sicilian aristocrats to appoint their own provincial officers; see p. 29—the elite of the Roman empire were well-positioned to assure the continuity of trends from which they benefited.

216. Pinzone 1987 [1999]: 249-251.

217. Pinzone 1987 [1999]: 254-255.

218. Concerning, specifically, the stationing of an army on the island for the first time since the late Republican period: "licet oram Siciliensem a Lilybaeo protentam ad Pachynum multitudo servabat armata". Thus also Julian., *Or.* 1.26 B–C.

219. As argued, on the basis of similarities in the text, by Zangemeister 1882 *ad loc.*

220. Viz., "[t]errae motu per totum orbem facto mare litus egreditur, et Siciliae multarumque insularum urbes innumerabiles populos oppressere".

decisions<sup>221</sup> is to produce a Sicily whose exemplary tranquility, insofar as it concerns the period of interest to this thesis, is achieved at the cost of the island's history.

Unfortunately, for our purposes, Orosius is not the only one of our sources in which Late Antique Sicily is basically made to disappear. The scant historiographical value of the hagiographical literature is not only a result of the complicated process of its transmission.<sup>222</sup> It was the natural outcome of a progressive expunction of historically-particular detail and a concurrent magnification (when not to say exaggeration) of moral dichotomies. The changes made to successive recensions of Euplius' *Passio*, which in its earliest known redaction contained some quite specific detail,<sup>223</sup> give the flavor of the thing. In a late recension of the text, Calvisianus is stripped of his distinction as ὁ λαμπρότατος κορρέκτωρ and gains, in recompense, an explicitly diabolical motivation.<sup>224</sup> Such effects are much less heavy-handed, the further back one goes, but even in the earliest hagiographies it is possible to capture the spirit which motivated them. Indeed, it may even be glimpsed in the *Life* we previously considered as being of greatest historiographical use. Melania's renunciation of the estates which were both the source and, for literary purposes, a proxy for her wealth actually partakes of a topos peculiar to the genre. As Motta explains, "le immagini di nobildonne che donano i propri beni alla chiesa è quasi una costante nell'agiografia siciliana". It was, in other words, a characteristic of the form, not the period.<sup>225</sup>

Despite such resonances, the similarity between Orosian historical and hagiographical treatments of Sicilian history is incomplete. The hagiographers, as we have seen, echoed Orosius' tendency to "flatten" the Roman history of the island, but they were not much interested in reproducing his complementary emphasis on its pre-Christian Greek history. Contemporary Byzantine *historians*, however, were only too happy to do so. Caruso, who has collected every mention of the island made in the eastern Roman historiographical sources of the fourth–ninth centuries, believes that "gli storiografi bizantini sentissero la Sicilia quale parte integrante della *oikoumene*, culturale prima che politica e amministrativa, bizantina"; and that, as a result, they paid disproportionate attention to the Archaic and Classical Greek Sicily "che il pubblico colto bizantino non poteva non conoscere".<sup>226</sup>

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221. An inventory of which could be spun out at much greater length: see the discussion in Pinzone 1987 [1999]: 261–267.

222. As already mentioned: see p. 34.

223. Discussion, see p. 34.

224. Viz., he is said to be acting ὑψωθείς...ὑπὸ τοῦ διαβόλου: PG 115:525. In a slightly earlier metaphrasis (Franchi de' Cavalieri 1928: 49, l. 5) of the text, Calvisianus' Roman colleagues are as roundly condemned, and in very similar terms: they are ὑπηρέται τοῦ διαβόλου.

225. Motta 2004: 346.

226. Caruso 1991: 128. Caruso's conclusions are especially interesting in that they highlight the different ways in which the *oikoumene* could be constructed—here in cultural rather than political terms, as above—and the different emphases each conception could produce.

### 3. The modern response.

#### 3.1. The glory that was Greece.

It was not only the "cultivated" minds of Medieval Byzantium for whom the Sicily of Greek colonists and tyrants was to prove so compelling. For much of the modern history of scholarship on the island, the centuries preceding Sicily's conquest by Rome were far and away the favorite period of ancient historians of the island. The similarity—"continuity" is probably too strong a word—is no accident. The preoccupations noted in our primary sources played an important, if rarely straightforward, role in shaping the secondary literature. My purpose, in this section, is to characterize two such trends, the development of which is of particular relevance to the questions posed in this thesis.

The first such theme is that with which this section begins. As might be expected, the modern echo of the ancient emphasis on Greek Sicily has tended to favor efforts to write the history of that period. So, too, has a peculiarity of more recent history. The number and prominence of monumental remains dating to the period of Greek colonial activity is, perhaps, the most salient feature of the Sicilian archaeological landscape. The temples at Segesta, Agrigento, and Selinunte, to name a few of the most impressive examples, are not easily matched, either in respect of their size or their state of preservation.<sup>227</sup> Unsurprisingly, they were to exercise a particular fascination for the wealthy British, French, and German aristocrats who, beginning in the seventeenth century, developed a taste for travel to see Classical world in which they had been educated. The Grand Tour,<sup>228</sup> as it came to be called, did not at first include Sicily: its itinerary, which preceded from north to south, terminated at Rome or, sometimes, Naples. In 1770, however, a Scot by the name of Patrick Brydone went further afield.<sup>229</sup> His *Tour through Sicily and Malta* (ed. 1773), was a major success, and it inspired many others to follow in his footsteps.

Among the individuals to do so was Johann Wolfgang von Goethe, whose *Italianische Reise* (ed. 1816-1817) took him to Sicily for a little more than a month in 1787. Like an earlier German traveler to the island—Johann Hermann von Riedesel, who wrote on his own *Reise durch Sicilien und Großgriechenland* (1771)—Goethe went to seek the Classical, and more specifically *Greek* Classical, past. The report he made of it sold as well as Brydone's, and its readers imbibed, not merely a wealth of colorful detail, but the author's identification of Sicily with its Greek past.

#### 3.2. And the grandeur that was...no.

In view of the availability of textual evidence for Sicily's Greek past; the disproportionate ancient historiographical emphasis on it; and the influence of

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227. Nor, at the risk of going too far afield, in their significance. Somewhat obscured by the fact that Sicilian Greek temples were so frequently called upon to serve as exemplars of the paradigmatic "Greek temple" is the degree to which they were, in fact, exceptional. (Segesta, of course, was not even a Greek city.)

228. For an introduction to the subject, see Buzard 2002.

229. On Brydone, Goethe, and the incorporation of Sicily into the Grand Tour, see Correnti 1999: 446–458.

Goethe and his fellow Grand Tourists, one might be forgiven for wondering whether we need seek other explanations for the lack of interest in matters Roman. But the prominence of Sicilian Greek antiquity is not merely the result of positive incentives toward its study. It also reflects the influence of a variety of *negative* incentives, many of quite recent vintage, which have acted to minimize scholarly engagement with the period which followed. A full accounting of them all lies outside the scope of this discussion (and would probably be impossible, anyway, at such limited historical remove), but we may productively speculate concerning at least a few of the factors involved.

Late nineteenth–twentieth century Sicilian history witnessed a number of developments which contributed to a generalized Sicilian estrangement from the island's Roman identity—and, in consequence, scholars' exploration of the historical bases on which it was founded. In Correnti's telling,<sup>230</sup> Sicilian "disillusionment" began with Garibaldi's unification of the country. After having participated enthusiastically in the latter's campaign of conquest, the island became a casualty of the political maneuvering which followed. Promises of aid, made as an incentive for Sicily's support, were promptly forgotten.

The island's disenchantment, however, was with the (contemporary) Kingdom of Italy, not necessarily the (historical) empire of Rome. Estrangement from the latter, particularly in its capacity as cultural touchstone, was probably given its greatest impetus by Mussolini's regime. The Fascists—who, after the fashion of Vittorio Emanuele and basically all his successors, royal and republican alike, promised Sicily more than they ever delivered—were not unique in their mismanagement of the island. But the damage done by their decision to involve Sicily in a war against its English and American friends<sup>231</sup> was unprecedented in its scope.

So, too, was their effort, comprehensible in light of the Fascist mythos but unrepeated by Italian governments before or since,<sup>232</sup> to claim for the island an explicitly "Roman" identity. It would be difficult to show, but it does not seem unreasonable to believe, that this unhappy conjunction played a part in souring Sicilians on that era of their past.<sup>233</sup> Suggestive, in this vein, is the fact that the modern Sicilian separatist movement, which emerged during the period of Fascist rule, took the Trinakria as its sigil. The figure, which had previously been employed during the revolution of the Sicilian Vespers, was an artifact of the island's Greek past.<sup>234</sup>

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230. The following discussion is substantially based on Correnti 1999: 559-573.

231. As Correnti (1999: 613) has observed, Italy's participation in the Second World War "non fu mai popolare in Sicilia, perchè rivolta contro due popoli, quello inglese e quello nordamericano, tradizionalmente amici della Sicilia: nell'isola circola ancora un proverbio popolare che dice: '*Cu tutti fazzu guerra—fora di l'Inghilterra!*'".

232. "Attempts...to claim a Roman identity for Sicily are extremely rare, and limited to the Fascist era": Prag 2009: 133. Bonanno 1933 is exemplary.

233. Cf. Torrelli's (2007: 97) invocation of "terre ideologicamente refrattarie alla romanità".

234. As Wilson (1990: 2-3) notes, "[t]he image first appears in archaic times, on painted pottery from Gela, and then is repeated in a variety of media throughout antiquity". Its specifically Greek origins have sometimes been debated, but are nevertheless still generally accepted: for a succinct statement of the argument, as well as a summary history of its later use, see Correnti 1999: 13–20.

Whatever its origins, the fact of scholarly disdain for Roman Sicily is not in doubt.<sup>235</sup> The earliest products of Roman Sicilian historiography (including, it must be admitted, some seminal works) echo with it.<sup>236</sup> More telling, however, is how few such works there *were*. It was not until the 1960s that the genre really began to grow. For the first decade of this production, it was engaged with a limited set of questions—for the early Roman period, primarily concerning the institutional history of the province; for Late Antiquity, with the Christianization of the island—which emerged from the primary literature.<sup>237</sup> The investigative remit widened, a little, in 1972, with Manganaro's "Per una storia della Sicilia romana".<sup>238</sup> Although focused on many of the same issues, Manganaro expanded the range of tools used to address them. In addition to the primary source literature, he also brought to bear information from the worlds of epigraphy and numismatics. An arguably greater innovation, however, occurred in 1981. The publication of Mazza's "Economia e società nella Sicilia romana"<sup>239</sup> marked the introduction of an entirely different theoretical perspective: the neo-Marxism which was then making inroads in Italian scholarship.

### 3.3. Marx, Carandini, and the great estate.

Notwithstanding his prominence, especially for the purposes of this discussion, Mazza did not originate the theoretical frame he brought to bear. That honor belongs, instead, to Andrea Carandini, whose work—among other subjects, at a Sicilian villa near Piazza Armerina, on which more momentarily—was informed by the dialectical materialism of his mentor, Ranuccio Bianchi Bandinelli.<sup>240</sup> Carandini, in turn, transmitted his legacy to the generation of archaeologists who came of age in the 1960s. Among the preoccupations they shared were an interest in Marx's "slave mode of production" (or rather, Carandini's understanding thereof) and a focus on

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235. Indeed, it has increasingly been recognized, even by Sicilian scholars: see i.a. Campagna 2003; Ceserani 2000; La Rosa 1987; Momigliano 1978 [1984]; Salmeri 1991. Malfitana (2008: 128), who suspects a "*deliberate* lack of focus on Hellenistic and Roman aspects of Sicily" (emphasis in the original), does not probably overstate the case. Cf., in this regard, the statements in n. 236.

236. Notable among them Ettore Pais (1888: 128) who characterizes Roman Sicily as the "triste pace ed il lugubre silenzio della morte". Holm (1898: 67), for his part, expresses a sentiment which seems all but self-negating, given that it appears in a work of Roman Sicilian history: "Seit dem Falle von Syrakus und Agrigent war die Bedeutung Siciliens bei weitem nicht mehr die alte. Eine römische Provinz hat nur in sehr beschränktem Umfange eine gesonderte Geschichte". Similarly Calderone 1965: 63: "L'età romana occupa uno spazio minore di quello riservato alle età precedenti. Ma ciò non è senza ragione, perché...la documentazione del periodo romano non offre oggi se non un panorama piuttosto uniforme, povero di fatti e fenomeni degni di particolare attenzione".

237. Institutional history: Calderone 1965; Dahlheim 1977; Kienast 1984–1985; Marino 1984–1985. Sicilian Christianity: Agnello 1964; Cracco Ruggini 1983; Pincherle 1964–1965; Rizzo 1984–1985.

238. Manganaro 1972.

239. Mazza 1980–1981.

240. Who, in addition to being an archaeologist and art historian, was also an active member of the Partito Comunista Italiano. I owe this insight, as well as many of the others which appear in this section, to Wickham's (1988) review of the four-volume *Società romana e impero tardoantico*, which opens with a capsule history of the Italian Marxist tradition by which the work was informed. On Piazza Armerina, see p. 56 with n. 260.



the role of commerce in the ancient Mediterranean.<sup>241</sup> The latter is relatively straightforward, but the former requires some explanation.

In brief, the slave mode of production described a system of large-scale commercial<sup>242</sup> agriculture which depended on a population of garrisoned and victualled plantation slaves. It was also one which restricted in both time and space. The conditions which made it possible, and more to the point, profitable, were primarily characteristic of the central Tyrrhenian region of Italy, and they did last for longer than a few centuries; specifically, between the second century BCE–second century CE.<sup>243</sup> Its importance, however, was out of all proportion to these constraints. According to Carandini, estates run on the slave mode of production were the foundation on which Roman senatorial wealth was built.

Given the prominence of senatorial holdings on Sicily, it is not unreasonable to wonder whether Carandini's geography is actually too limited. Whether or not the slave mode of production was also characteristic of Roman *Sicilian* agriculture, however,<sup>244</sup> it remains relevant to the present discussion: if not for the phenomenon itself, then certainly on account of the assumptions which underpin it. Per Carandini, it was the ready availability of a market which provided the impetus for slave estate organization and –management. This, at least, was an advantage which Sicily also possessed. The textual evidence reviewed in Section II.1 suggests that Sicily long existed in a commercial "sweet spot". Its access to the capital was insured both by simple proximity and, following the maturation of North African agriculture, by the shipping regime which insured the delivery of North African grain to Rome.

Moreover, as we have observed, it enjoyed an advantage which North Africa was denied: freedom from the demands of the *annona*. These attributes did not go unnoticed by scholars like Mazza. On the contrary, their awareness contributed to a conception of Sicilian history which, in certain important respects, resembled that which was being written about the slave-estates of Peninsular Italy. In specific, it tended to emphasize the unequal power relations which existed between the owners and tenants of these large estates, and the exploitation of the latter by the former. For scholars weaned on Marx, it was all too easy to reduce Roman Sicilian history to a narrative of class struggle.

As will later become clear, I do not think this impression was entirely misguided. The role of absentee landowners in the Sicilian economy was undoubtedly significant, and in view of the arrangements they usually made—with *conductores*, tenants, and, yes, slaves—it is safe to assume they also enjoyed

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241. The interest of the "Carandiniani" in Mediterranean trade, in Wickham's opinion (1988: 186–187), was a result "of the sort of sites the group found themselves excavating (lots of pottery; a role for trade well above the norms proposed by Finley or A. H. M. Jones)", although he goes on to note that, if their focus was originally casual, it did not remain merely so; it came to be "buttressed by appeal to a variety of theorists, with Marx, Weber, Kula and Braudel in the front line".

242. In which respect the significance of Carandini's second postulate—to wit, that the ancient Mediterranean economy was well-developed—becomes obvious.

243. Wickham rehearses the discussion regarding why, or why not, the slave mode ceased to be profitable: 1988: 188–189.

244. The history of the Slave Wars, and more to the point, the participation of Italian landowners in the drama recorded by Diodorus, is suggestive, at least for this early period.

significant social capital. The nature and effects of this inequality, however, have not always been properly understood. The culprit, in this regard, is not merely Marxist ideology; it also stems from an apparent assimilation of ancient and medieval– or modern phenomena. The survival of terms originally employed to describe the Roman estate system appears to have facilitated this error. Probably the most consequential example of this confusion is the term *latifundium*. In the ancient sources, a *latifundium* is a "grande domaine, ou plutôt grande propriété, présentée comme le résultat d'une appropriation" of lands in the public domain or belonging to small-holders.<sup>245</sup> To the degree that such estates grow at the expense of smaller properties belonging to the less-wealthy, it is reasonable to infer a certain tension between the interests of their respective owners. But a great deal more than this has historically been assumed. Debates concerning Roman *latifundia* are informed by the conflation of the term with "latifondo", its modern Italian descendant, the connotations of which are quite different.

*Latifondi* were a late medieval and early modern Latin American and Mediterranean phenomenon—ubiquitous, ironically, on the island of Sicily—whereby absentee proprietors aggregated vast expanses of agricultural land to be worked by tenant farmers under the management (in the Sicilian case) of a *gabelloto*. The latter were short-term lessors tasked with the collection and remission to the proprietor of the estate's profits, less a share they kept for their troubles. Needless to say, this share tended to vary substantially in function of the *gabelloto*'s probity. Corruption was frequent, and the imbalance of power existing between tenant farmer and lessor made for a situation in which exploitation was both common and difficult to escape. Many tenants found themselves crushed by debt into a choice between the repossession of their lands or de facto indentured servitude.<sup>246</sup>

Once this identity had been established, it was easy enough to find other points of similarity. The presence of the *conductores*—concerning whose rapaciousness, recall, Gregory in fact complained—and the frequent absenteeism of Senatorial and ecclesiastical proprietors, made it easy to adduce the workings of a similar dynamic in the ancient Roman case. There was even an analogue for the medieval tenants, who, in Roman times, were known as *coloni*. As Grey has shown, this is a term which has been misunderstood since at least the late nineteenth century.<sup>247</sup> (The period, it is worth noting, during which Sicilian *latifondi* were at their most exploitative.<sup>248</sup>) The misunderstanding stems from the association of *colonus* with *colonatus*, a Tetrarchic legal notion which was interpreted as reifying the relationship of dependency existent between *coloni* and their landlords.<sup>249</sup> It seems, in fact, to have done nothing of the sort, but the misunderstanding sufficed to cement the impression that *coloni* were abused in much the same fashion as their medieval and modern counterparts.

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245. Étienne, Corbier & Aymard 1995: 11.

246. Galt 1991: 241-242.

247. Grey 2007.

248. Schneider & Schneider 1976.

249. The actual meaning of the term, as Grey explains, is difficult to pin down. It occurs a grand total of five (!) times in Tetrarchic legal sources

The immediate effect was to render plausible an interpretation which has consequently been taken for granted in discussions of the Roman Imperial and Late Antique Sicilian countryside, despite it having as much or more to do with that of much later period.<sup>250</sup> (And, moreover, despite changes in settlement patterning and organization *between* the early Imperial and Late Antique periods, which in fact emerge from the sources.<sup>251</sup>) One result of this conflation has been to strengthen the impression of an ahistorical, unchanging Sicily (as already encountered several times in this chapter). Another, however, has been to diminish the agency of native actors. In view of the inarguable significance of estate agriculture; the conception of it as a system of unrelenting oppression, which took root in the fertile soil of Italian Marxist thought; and the low visibility of Sicilian actors in our texts, it is an understandable mistake.

### III. Perspectives from the archaeology of Roman Sicily.

#### 1. Early research.

It is also, however, one which archaeology is well-situated to rectify. Or so it would be, had the development of Roman Sicilian archaeology not followed a similar course to Roman Sicilian historiography. Notwithstanding some scattered early engagement, archaeological scholarship on the earliest phases of the island's Roman history has until recently been quite limited.<sup>252</sup> Indeed, it was not until 1981 that a scholar attempted to engage seriously with the archaeological evidence for Republican Sicily *per se*. There was precious little to work with. Coarelli prefaces his treatment of Republican Sicilian settlement and economy by acknowledging as much: "es necessario sottolineare", he warns, "la quasi totale assenza di analisi dettagliate del territorio per quanto riguarda il periodo romano".<sup>253</sup>

With respect to later Roman Sicily, the story is much the same. The archaeological investigation of the period has, perhaps, a longer history; late Roman materials were already being published in the first half of the nineteenth century.<sup>254</sup> But it was a very different sort of scholarship than that with which we are concerned here. To the degree that the authors' concerns extended beyond the purely art-historical—consisting, chiefly, in the identification of decorative motifs and iconography—they were primarily focused on the island's Christian heritage. It was not until the 1880s that there began to emerge an interest in questions of society or economy. This different orientation is reflected i.a. in Salinas' 1885 study of a collection of lamps from Selinunte and Castelvetro. In addition to treating aspects

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250. To scholars of the Early Modern (e.g. Schneider & Schneider 1976) as well as Late Antique (Cracco Ruggini 1980: 13-16) periods.

251. See for a summary Carandini, Ricci & de Vos 1982: 15-21.

252. See, for a recent *status quaestionis*, Prag 2009.

253. Coarelli 1981: 1. Prag (2009: 132-133) elaborates: "The published archaeological data were extremely limited...; no proper epigraphic corpus existed...; and no proper numismatic study of the Roman period".

254. Including, by way of example, North African lamps: di Paola Avolio 1838.

of their decoration, Salinas also inquires after their origin, and the route by which they came to the place of their eventual discovery.<sup>255</sup>

Similar questions characterize the scholarship of Paolo Orsi, whose work—most famously in and around Syracuse, but also at sites as far-flung as Heraklea Minoa and Selinunte—would constitute another milestone. Above and beyond the portable material culture which occupied his contemporaries, Orsi considered the "spazi bizantini" in which they were found, including monuments and the built environment.<sup>256</sup> Notwithstanding the extent and significance of this work, however, it does not seem to have come from a place of genuine enthusiasm. Orsi viewed the study of these remains as basically a "dovere d'ufficio", the discharge of which necessarily preceded his work on the prehistoric– and classical remains in which he was really interested.<sup>257</sup>

For the birth of interest in late Roman Sicily per se, it is necessary to go further forward in time.<sup>258</sup> The 1960s marked the moment when "la ricerca si è spostata dall'analisi dei singoli monumenti all'indagine sulla distribuzione della popolazione, sulla dinamica degli insediamenti, sulla circolazione delle merci in rapporto alle vie di comunicazione e sugli aspetti del rituale funerario".<sup>259</sup> The themes, in short, with which this thesis is also concerned. Among the places where this new emphasis found expression was in the vicinity of Piazza Armerina, which had theretofore been famous principally on account of mosaics discovered at the nearby Villa Romana del Casale.<sup>260</sup> Beginning in the 1960s, archaeologists undertook a (still-ongoing) excavation of the nearby settlement conventionally known as Philosophiana.<sup>261</sup>

Despite the importance of such projects, however, they remained the exception. As late as 1996, Wilson was still urging attention to what had "hitherto been the Cinderella of Sicilian archaeology".<sup>262</sup> This is not to say that progress was entirely stalled. Wilson himself has made important contributions to the study of rural habitation, notably by his excavations at two sites in the province of Agrigento: Castagna and Campanaio.<sup>263</sup> And there have been significant contributions made in the fields of maritime archaeology and ceramics, too.<sup>264</sup> For our purposes, however,

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255. Fiorelli 1885.

256. Examples, see Vitale 2002: 151, n. 16.

257. Vitale 2002: 151.

258. Despite some promising developments, especially in the 1930s' work of Giuseppe Agnello, the first half of the twentieth century actually witnessed a retrenchment of the antiquarian– and art-historical tendencies which had characterized the earliest phase of scholarship on late antique Sicily: Vitale 2002: 153. A symptom of this retrenchment was the attention—indeed, mania—which focused on the mosaics unearthed at the villa romana del casale; see n. 260.

259. Vitale 2002: 155.

260. The excavation of which began in 1929 under Orsi. Work continued on site through the 1950s, after which a cover was built over the mosaics to aid their conservation. Carandini, whose 1962 tesi di laurea treated the mosaics, also conducted some localized excavations in the 1970s; see Carandini *et al.* 1982.

261. Bibliography, see Vitale 2002: 155, n. 28.

262. Wilson 1996a: 66.

263. On which see Wilson 1985; Wilson 1993 [published 1996]; Wilson 1996b and Wilson 2000a; Wilson 2000b, respectively, as well the discussion in Chapter 5, Section II.2.

264. The bibliography on both subjects is too expansive to be listed here. For a summary of work done

the most significant strides have come in the area of archaeological survey. In Chapter 5, I will consider some of the fruits of this line of research. Here, however, I am more concerned with delineating its origins; its preoccupations; and, finally, its significance for the questions taken up in this thesis.

## 2. Archaeological landscapes in theory and practice.

### 2.1. A brief history of archaeological survey in the Mediterranean.

The history of survey in the Mediterranean is one of fusion. It represents the outcome of the integration of several different strands of thought, not all of them of Mediterranean origin. Among the most important, in fact, grew out of the American New Archaeology of the 1960s-70s, now more commonly referred to as Processualism.<sup>265</sup> New Archaeologists rejected as too parochial their culture-historical predecessors' interest in artifacts and typologies. Like the American anthropologists with whom they identified, New Archaeologists favored a more ambitious approach.<sup>266</sup> They adopted a self-consciously "scientific" interest in "the discovery of regularities that are in a sense spaceless and timeless".<sup>267</sup> The scale of such questions demanded an equally expansive theater of inquiry, and, as a result, regional patterns of settlement began to seem a more interesting topic of study.<sup>268</sup> Archaeological survey, which until that point had existed on the margins of academic discourse in the discipline, suddenly appeared an attractive means of providing "information on the number, the location, and the nature of sites within a given region".<sup>269</sup> Informal landscape surveys of the sort undertaken during the Works Progress Administration were scrutinized and a new, rigorously systematic survey methodology outlined.<sup>270</sup>

The aims of New Archaeological survey were, in turn, to prove congenial to proponents of a number of different European archaeological traditions.<sup>271</sup> Regional inventories in the Scandinavian tradition,<sup>272</sup> and Italian topographical studies like those of the ongoing *Forma Italiae* series, operated on a similar scale, and saw much to like in the New Archaeologists' developing methods. So, too, did the members of the contemporary South Etruria survey,<sup>273</sup> which, like most of the earliest American surveys, was in origin an exercise in cultural resource management. Development in the Mediterranean, it was increasingly perceived, posed a threat to the region's archaeological heritage, and the need for documentation was acute. To

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in the 1980s, see Purpura 1993. More recent activity is treated in Tusa 2002. For a succinct *status quaestionis* of Roman pottery studies in Sicily, Hayes 2006.

265. Binford 1962 provided the movement's manifesto.

266. On changing perspectives among American anthropologists at this time, see discussion in Garbarino 1977; Harris 1968.

267. Phillips 1955: 247.

268. See e.g. contributions to Chang 1968.

269. Heizer & Graham 1967: 14.

270. In e.g. Binford 1964; Flannery 1976.

271. Barker 1996 summarizes.

272. E.g. Tode 1926.

273. Collected survey results, which encompassed more than two decades of work, were never formally published. See, for a synthesis, Potter 1979.

archaeologists working in the economically depressed Europe of the late 1970s-80s, survey seemed a cheap and effective way to achieve it.<sup>274</sup> Fruits of this interest, among which must be counted the Albegna Valley / Ager Cosanus and Agro Pontino surveys, maintained the regional scale and settlement hierarchy interests of their American contemporaries.<sup>275</sup> Indeed, the latter project formed part of a constellation of surveys undertaken under the rubric of studying "Regional Pathways to Complexity" (RPC), a Dutch initiative directed by Attema and Burgers.<sup>276</sup> The Americans' methodology was adapted, in a variety of different ways, to the Mediterranean case, but remained basically unchanged.<sup>277</sup>

Nevertheless, change was afoot. The scientific aspirations of the New Archaeology were taken to their logical conclusion by Shennan and Ammerman, who inaugurated a too-brief period of experimentation designed to simulate the conditions faced by survey archaeologists in the field.<sup>278</sup> The significance of their results, which showed the possibility of varying levels and kinds of bias, remain a source of debate (and are furthermore likely to vary significantly<sup>279</sup>). As Terrenato notes, however, it is probable that the desire to in some way "compensate" for these results played a part in driving the most significant development of the late 1980s-90s.<sup>280</sup> That was the *intensification* of survey, toward which several other trends were simultaneously pointing. Paradoxically, the two most influential were entirely opposite in their theoretical orientation. The interest in statistical rigor, as demonstrated by Shennan and Ammerman, was shared by some of the best-known proponents of Mediterranean survey, among them Cherry and Bintliff.<sup>281</sup> The latter consequently read with interest of e.g. Dunnell and Dancey's early experiments with a "siteless" survey methodology, the purpose of which was to control for conceptual biases introduced by the researcher. "There is a tendency", Dunnell and Dancey wrote,

to think of the sampling universe as a set of sites rather than as a bounded unit of space. In many traditional surveys, this leads to omission of the areas searched in favor of a map of the archaeological manifestations discovered.<sup>282</sup>

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274. Yntema 2002: 1-2.

275. Perkins 1999; Voorrips, Loving & Kamermans 1991.

276. The RPC bibliography is extensive. See i.a. Attema 2001; Attema *et al.* 1998; Attema *et al.* 1999; Burgers 2002.

277. Cf. Bintliff's comments in van Leusen 2002a: 135 regarding the sampling strategy employed by the Agro Pontino survey: "[y]ou can see that the discussion goes back to Binford and is very much American-driven, by the enormous open spaces of the American south-west which allowed perfect geometrical patterns of sampling". Perkins, meanwhile, reflected that the tracts delineated by his own Albegna Valley project were "excessively geometric": 1999: 106. The same could be said of the four transects extending outward at right angles from Tuscania: Rasmussen 1991.

278. Ammerman 1985; Ammerman & Feldman 1978; Shennan 1985. Schon 2002 is a welcome modern addition to the literature.

279. See discussion in Chapter 3.

280. Terrenato 2004: 36-37.

281. See e.g. Cherry 1983.

282. Dunnell & Dancey 1983: 268. Such conceptual biases constitute a locus of discussion in Chapter 3 of this thesis.

Meanwhile, in Great Britain, a debate had begun concerning the degree to which archaeology could—and should—be the sort of "science" to which Processualists aspired. The result was a multiplicity of theoretical strands united (to the degree that they were united at all) by a name—post-Processualism—and a project—to foreground the fundamentally human character of the past.<sup>283</sup> The consequences for survey were far-reaching. To post-Processualists, the "sites" identified by regional scale projects were too far abstracted from the embodied reality of human life to provide any insight into its conditions. Their interests—concerning "the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them"<sup>284</sup>—pointed toward a wholly different scale of analysis. Phenomenologically-minded archaeologists like Christopher Tilley stood (and stand) at the extreme end of this range, where, it was argued, only "thickly described" individual experiences of landscape were of heuristic value.<sup>285</sup> Even more moderate adherents of the school, however, were apt to argue for hyperintensive, and consequently smaller-scale, projects in which the archaeologist might develop a richly textured experience of the area under study.

Needless to say, their preoccupations were unevenly shared: a topic to I return in the following section. But their voices added to the chorus calling for an intensification of collection and a concomitant restriction of the survey universe, both of which have increasingly come to dominate the discussion, and to a variable degree the practice, of survey in the Mediterranean.<sup>286</sup> This, in turn, has inspired an ongoing debate—documented in contributions to the POPULUS volumes of 1999-2000 and, still more recently, *Side-by-Side Survey*<sup>287</sup>—concerning the degree to which such results can be productively compared, and the findings of increasingly pointillistic surveys effectively integrated.

## 2.2. Landscape perspectives in Italian archaeology.

The desire for integration, however, raises another set of questions, at once related to yet distinct from the methodological debates summarized above. Calls for standardization and the interregional comparability of survey data, Witcher has observed,<sup>288</sup> have thus far been greatly more interested in delineating the impediments thereto—as for example the variable action of post-depositional processes on the distribution and density of surface ceramics<sup>289</sup>—than in articulating precisely *what*, or rather *why*, we should wish to compare. The problem, as he sees it, is most acute in Italian archaeology, especially of the Roman Imperial period, and is basically one of undertheorization. In contrast to the range of "interpretative"

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283. Given the multiplicity of theoretical perspectives implicated, the bibliography is predictably extensive. Important are Bender 1993; Bradley 1994; Bradley 2000; Cosgrove 1985; Hodder 1987; Shanks & Tilley 1992; Tilley 1994. See, for an introduction, Johnson 1999, esp. 98-115.

284. Ingold 1993: 156.

285. Tilley 1994; Tilley 2004.

286. The new paradigm has been most consistently embraced by archaeologists working in Greece, where increasingly stringent legal restrictions often mean it is the only viable option: Tartaron 2008: 90.

287. POPULUS: Bintliff & Sbonias 1999; Francovich & Patterson 2000; Gillings, Mattingly & van Dalen 1999; Leveau *et al.* 1999; Pasquinucci & Trément 2000; *Side-by-Side*: Alcock & Cherry 2004.

288. Witcher 2006: 40.

289. E.g. Taylor 2000. The topic is one to which I return in Chapter 3.

archaeological paradigms being brought to bear on survey data elsewhere in the Mediterranean—by which he seems mostly to mean the Aegean—Italian theoretical frames have remained mired in tradition.<sup>290</sup> These he identifies as a naive historicism, whereby archaeological findings are forced into congruence with various textual narratives, and a by-now "orthodox" Marxism of the sort which inspired discussion of the "slave mode of production" and, as discussed in Section II, a wrong-headed and ahistorical construction of the *latifundium*.<sup>291</sup>

There are, to my mind, several problems with Witcher's diagnosis. In light of the fact that his putative "worst practices" are illustrated, not with a bad example drawn from the Italian archaeological literature, but rather a "hypothetical field survey", his characterization looks more like caricature.<sup>292</sup> That I choose to quibble with Witcher's diagnosis, however, is not to suggest that his prescription is misguided. Some of his recommendations make a great deal of sense, among them one which consists, basically, in an injunction to relax. The impossibility of a direct comparison of sherd densities as recorded by two different projects, he argues, is insufficient reason to abandon artifact-level intensive survey in favor of traditional site-based approaches.<sup>293</sup> If the latter seem to generate more comparable results, it is only because their findings have been rendered intelligible by a process of interpretation which is no more or less opaque than is brought to bear on sherd density figures.<sup>294</sup> Witcher's other suggestions, meanwhile, suggest a greatly expanded range of possibilities for the interpretation of those sherd densities. He proffers a kaleidoscope of different themes, among them phenomenology, memory, materiality, and temporality. What they have in common, however, is an emphasis on the human experience of the landscape under study, to which is opposed, often explicitly, the hide-bound socio-economic perspectives he perceives as the status quo.

### 3.The human dimensions of socio-economic history.

Polarizing the debate in this fashion is limiting—and, to my mind, more than a little curious, given the intellectual history of Italian landscape archaeology as described by Witcher. The Marxist perspectives he dismisses as tired have led to some questionable insights, but they remain valuable as an example of the degree to which attention to socio-economic trends is compatible with a fully humanized archaeology.<sup>295</sup> In some periods, in fact, they are integral to it. The several centuries of interest to this thesis are ones in which socio-economic phenomena are of surpassing importance to both history and historiography. The latter, as I have argued, is rife with oppressed Sicilian peasants (the characteristics of whom are

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290. Cf. the similar (albeit less pointed) comments in Attema 2002.

291. Witcher 2006: 41-42. On the "slave mode of production" see e.g. Carandini 1988.

292. Witcher 2006: 44-45.

293. As counseled by e.g. Fentress 2000; Osborne 2004a; Osborne 2004b; Terrenato 2000; Terrenato 2004.

294. Given 2004b earlier made a similar point, which analysis seems to bear out.

295. Witcher's disdain is, I think, the result of his own formation, on the effects of which see Wickham 1988. His complaints are of the sort for which Marcone (2007) has little patience and a too-sharp tongue: he opines that the "tradizione di pensiero storiocconomico [è] talvolta liquidato troppo facilmente come marxismo da poco accorti studiosi anglosassoni".



admittedly defined, at least in part, by the retrojection of late Medieval and early modern images). And the former includes Sicily's several episodes of importance as *nutrix* to Rome and then Constantinople, which in theory required the intensification of cereal culture, and which was long thought to have driven a consolidation of rural settlement in various parts of the island. In elucidating these sorts of dynamics, survey stands to shed light on the experience of the people who lived them.

Witcher is correct, however, that getting at that experience will require a change in thinking—or, at the least, a change in orientation. Key, here, is the notion of human agency, albeit not at the level of the individual. It is possible to identify individuals in the archaeological record, but not usually to do so consistently, and a theory which depends on their presence is of limited utility. Happily, however, more sophisticated readings have lodged agency (and indeed to a great degree personhood) in the interactional space *between* people, and even between people and objects.<sup>296</sup> Construed this way, agency proves to be useful for a variety of reasons. In specific, it becomes a concept which can be related intuitively to the relations—of power and otherwise—prevalent between the sorts of actors in which an archaeology of the Roman Sicilian countryside is interested. This is a contexts in which it is useful to have recourse to the Italian tradition of Marxist analysis of class conflict and, more broadly, negotiation. It is also, however, a context in which the agency of native Sicilian actors has too often been minimized. One of the aims of this thesis is to rectify this imbalance.

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296. E.g. Gardner 2002; Gardner 2004. This sort of social, or perhaps better collective, construction of agency emerges from the philosophy of Mead 1934.

## CHAPTER 3. METHODOLOGY

### I. Introduction.

This project, in briefest terms, is an attempt to characterize and analyze a historical Mediterranean landscape. In doing so it makes use of the range of sources which are typical of such endeavors, and which include, among other things, the corpus of ancient (and secondarily, modern) texts considered in the previous chapter.

Alongside these textual resources, however, are two others of a different sort. These are, respectively, archaeological—a corpus of ceramic fragments—and computational—Geographical Information Systems software. The plausibility, and in some cases the validity, of conclusions drawn on the basis of their study depends on the articulation and application of a consistent mode of analysis. The goal of this chapter is to present the methodologies I employ in the treatment of each of these sources, and the ways in which they interrelate.

### II. The Marsala Hinterland Survey.

Because the data upon which I draw is, in large part, the outcome of work done by the Marsala Hinterland Survey, it is worth being explicit as to the methodology of the project in question. In brief, this consisted in systematic pedestrian survey with intensive, extensive, and on-site components. Depending on the regime, project participants explored one of three different kinds of Topographic Units (TUs).

Under intensive survey conditions, teams of student volunteers, typically numbering between 4-6 individuals plus a team leader, walked a series of contiguous tracts located within a pre-selected 1 km x 1 km block of the survey universe. Each set of these tracts constituted a Discovery Unit (DU), the borders and shape of which were usually coterminous with modern agricultural fields. (As such, a survey unit block might contain a variable number of DUs.) Fieldwalkers were spaced 10 m apart<sup>297</sup> and tasked with recovering all of the artifacts which lay within a half meter to their left and right. In this way, approximately 10% of the notional survey area was actually covered. Especially eye-catching finds from outside of this area were also sometimes collected; such "grab" samples do not enter into the calculation of areal artifact densities, but may prove to be of anecdotal use in establishing the chronology of use of a given area.

Extensive survey, conducted primarily as a form of reconnaissance of prospective areas for intensive survey as well as to situate those areas in their wider geographical context, employed a smaller group of one or two individuals. Collection of artifacts from Extensive Survey Units (XSUs) was limited to a representative sample, the value of which, like the "grab" samples encountered on

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297. For pragmatic as well as principled methodological reasons. Maintaining this distance was, happily, rendered the easier by the discovery that the distance between rows in the vineyards most frequently walked was consistently 2.5 m. Walkers could be space four rows apart without the need for laborious measurement at the beginning of every tract.

intensive survey, is primarily anecdotal. The situation is inverted in the case of on-site survey, where smaller areas—identified as of interest on account of their exceptional density of artifacts—were designated for total collection. These areas were gridded, and a sample of the resulting Grid Collection Units (GCUs), the size of which varied in keeping with methodological needs, were separately walked and documented in the same fashion as the DUs described above.<sup>298</sup>

The artifacts collected during intensive, extensive, and on-site survey were counted in the field and bagged for transport to Marsala's Museo Baglio Anselmi at the end of the working day. Objects of archaeological or aesthetic interest were accessioned by the Museum. In an effort to minimize the archaeological "impact" of a full-collection survey, redundant and non-diagnostic artifacts were returned to the fields whence they came. Before being "repatriated", however, they were all subjected to examination and documentation. Artifacts were first divided according to material, whether lithic, glass, metal, or, most commonly, ceramic. Ceramics from a given survey unit were weighed; counted a second time; and divided into diagnostic and non-diagnostic sherds. Diagnostic fragments were either decorated or pertained to a morphologically-distinctive part of the parent vessel—most often the rim, handle, or base. Such features provide information pertinent to the further classification of the diagnostic sherds, which were subsequently divided, by project participants, according to presumed chronology. This division formed the basis for their apportionment among the ceramicists working on each of the phases implicated in the project finds. (My own analysis, as explained below, would ultimately lead me to the consideration of sherds other than those I was given for study.<sup>299</sup>) Each group of broadly-dated sherds—including, most pertinently, those characterized as "Roman"—was then classified according to a system inspired by Gregory's chronotypes.<sup>300</sup> Division was made according to period, functional class, and, within each such class, known wares. All of this information was recorded and compiled in the project GIS (for which I am primarily responsible).

Needless to say, the delineation of project-wide methodologies like those above has informed the ways in which I approach the data generated by survey. It is not, however, the only such factor. The two sources of data to which I make reference in Section I—to wit, the ceramic materials and the project GIS—impose their own constraints. An awareness of the possibilities and limitations inherent in such data is therefore crucial to the delineation of appropriate methods of analysis.

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298. As will be readily apparent, many of these procedures bear comparison with the survey methodology of the Eastern Korinthia Archaeological Survey, in many respects the methodological inspiration for MHS: Tartaron *et al.* 2006.

299. See the conclusion of Section III.1.2.2.

300. On which see 2004: 19. MHS practice was a little less formal—and thus more rapidly executed—than that which Gregory contemplated; details, see III.1.1.1, below.

### III. Sources and methods.

#### 1. Ceramics.

The first source of data is the corpus of ceramic sherds recovered by the project during its two seasons of pedestrian field survey.<sup>301</sup> As indicated in Section II, these are housed in the Museo Baglio Anselmi in Marsala.

The sherds in which I am principally interested are those dated, with a greater or lesser degree of precision, to the first–eighth centuries.<sup>302</sup> This period constitutes the lion's share of Sicily's Roman phase, which, as previously explained, actually began during the third century BCE. Most of the sherds pertaining to the approximately 250 years before the change in era, however, were given for study to the project's Hellenistic ceramic expert, Carmela Cipolla. The smaller number which I retained, mostly due to the vagaries of sorting,<sup>303</sup> provide useful information concerning circumstances in the survey region previous to the period of my greatest interest, and as such, suggest the contours of a "ground state" with respect to which conditions were later to vary. They are consequently included in the catalogue, too. Many eighth century sherds, meanwhile, are not, and ninth– and tenth century fragments are entirely absent. My lack of experience with the relevant productions (which, it is worth noting, are still imperfectly known<sup>304</sup>) counseled against their inclusion in this study, at least in very specific terms. That said, I have sometimes encountered sherds which experience—especially at Sofiana, where, in the summer of 2010, I was privileged to work with a much more practiced ceramicist<sup>305</sup>—indicated might belong to the period in question. As such, I have noted where such sherds were especially numerous, and, where it seemed appropriate, considered the implications of their presence. It is my hope that even such remarks will be of some

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301. Viz., 2008 and 2009. For a breakdown of project activities, see Chapter 1, n. 3.

302. These several centuries include, in terms utilized by Malfitana *et al.* 2008: 171, the Early– (30–100), Middle– (100–300), and Late (300–450/475) Imperial periods; the Early Byzantine (450/475–640/650) period; and a part of what I will call, somewhat arbitrarily, the Late Byzantine or Early Islamic period. (The more than a century of struggle between these two powers makes dividing the two periods more than a little difficult. Conventionally, the island "fell" to the Arabs in 965, with the conquest of Rometta Vitale 2002: 147; but the conquest of Lilybaeum was accomplished a great deal sooner, in 827.

303. The fact that preliminary sorting–for–period was done by individuals with little previous experience meant that a certain quantity of pots were mistakenly apportioned.

304. A result, in large part, of the fact that scholarly interest in seventh–tenth century productions did not really begin until the 1990s. (For a contemporary assessment of the difficulty provided by such wares across the Mediterranean, see Patterson 2000.) Since then, however, we have learned a great deal, principally on account of the discovery of an increasing number of securely-dated deposits. See e.g. Ardizzone 2000 for eighth century cooking wares from Cefalù; Arcifa 2004 on late ninth–early tenth century cooking– and common wares from Rocchicella, near Mineo (CT); and Pezzini, Alaimo & Giarrusso 2004 on late tenth–eleventh century cooking pots from Palermo. The number of published images, in consequence, has also multiplied. But it is one thing to see a photograph (or a drawing) of a pot, and quite another to see it in person. I have had comparatively little of the latter sort of experience (but see n. 305), and thus have tended to caution.

305. Viz., Dr. Emmanuele Vaccaro (University of Cambridge), whose help I greatly appreciate. In addition to providing me with the opportunity to see a variety of productions I would not otherwise have encountered, he was good enough to consult with me on a variety of topics germane to this thesis.

use, notwithstanding the fact that they are too impressionistic for the application of the methodology outlined below.

Broadly speaking, the extraction of data from a group of sherds entails two related but basically independent sorts of analysis. Insofar as is possible, they must be classified; and, once this is accomplished, they must be quantified. In neither case is the process as straightforward as it might at first seem. Both entail the introduction of assumptions on the part of the archaeologist, the enumeration of which is necessary for a fuller understanding of the data produced.

### 1.1. Aspects of ceramic classification.

#### 1.1.1. Classes and chronotypes.

My approach to ceramic classification is, *grosso modo*, that employed by MHS for ceramics dating to all periods of the project's interest. This, in turn, bears comparison with Gregory's system of chronotypes, employed to good effect on the Sydney Cyprus Survey Project (SCSP), the Eastern Korinthia Archaeological Survey (EKAS), and the Australian Paliochora-Kythera Archaeological Survey (APKAS).<sup>306</sup> A hierarchical division is made, first, according to period;<sup>307</sup> second, presumed functional class; and third, into the several groups of vessel which each functional class encompasses. As is made clear by discussion in the MHS preliminary report,<sup>308</sup> the periods to which a given sherd may be assigned are relatively broad: this thesis concerns materials from the "Roman" Period and "the Late Empire and After". The reasons for such breadth practical as well as conventional. Among the practical considerations was the desire to minimize error resulting from the initial sorting of materials by project members with varying levels of ceramic expertise. Convention, meanwhile, counseled the division into periods which long use has rendered intelligible (if often somewhat hazily-defined) to Mediterranean archaeologists and historians.

The five functional classes into which I divide the sherds studied here owe a similar debt to terminological convention.<sup>309</sup> They are, in no particular order,

1. Finewares
2. Lamps
3. Amphorae
4. Common- and cooking wares

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306. SCSP: Meyer 2003; EKAS: Tartaron *et al.* 2006: 475-483. Annual reports on APKAS' activity for 1999-2005 are available online at <http://kythera.osu.edu/results.htm> [accessed September 1, 2015]. Chronotypes, see n. 300.

307. It is in continuing to employ the periodization familiar to Mediterranean archaeologists that I depart most substantially from Gregory's best practices. He counsels abandoning such imprecise terms in favor of a chronology expressed consistently in years BP: 2004: 23.

308. Blake & Schon 2010. Division is made into a period encompassing the Paleolithic through the Iron Age; the Iron Age and Archaic Periods; the Punic and Hellenistic Periods; the Roman Period; and the period beginning with the Late Empire and ending in the early modern era.

309. Cf. e.g. the six "functional categories" enumerated by Peña 2007b: 20, which are comparable to those I have enumerated save for in respect of the absence of tile from Peña's schema.

5. Tile and dolia<sup>310</sup>

These classes, in turn, are divided into the "groups" mentioned above. While it is sometimes true that these groups correspond to known ceramic *productions*—the definition of which may entrain a range of complementary data, as for example the group's place of manufacture—this is not always and everywhere the case. The delineation of groups is, in the first instance, of organizational rather than heuristic use. Consequently, groups may be defined according to a variety of different criteria. (These will, however, always be explained.) As probably goes without saying, the number of "groups" delineated in the third stage is apt to vary substantially from one functional class to another. Similarly variable is the number of categories into which each such group may be subdivided. Consider, for example, the classification of sherd SL3027, identified as a fragment of a Hayes<sup>311</sup> form 3E or F Phocaeen Red Slip plate:

- I. Finewares
  - A. Red-slipped wares
    - 1. African Red Slip
    - 2. Eastern Sigillata "A"
    - 3. Phocaeen Red Slip
      - a) Form Hayes 1
      - b) Form Hayes 2
      - c) Form Hayes 3
        - (1) Type A
        - (2) Type B
        - (3) Type C
        - (4) Type D
        - (5) Type E or
        - (6) Type F
      - d) Form Hayes 4
      - e) ...
    - 4. Terra Sigillata Italica
  - B. Thin-walled wares
    - (1) ...

The point of this subdivision—which, in practice, allows for the classification of a given sherd at one of several levels of increasing specificity—is to maximize the information which may be derived from the study of a given sherd. That some

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310. On the conflation of the two categories subsumed within numbers 4. and 5., see discussion at Sections III.1.1.2.d and III.1.1.2.e, respectively.

311. *LRP* 329-338.

ceramics—Phocaeen Red Slip is an apposite example—may be very specifically classified does not impose upon the ceramicist an obligation to achieve such precision in all cases. (Indeed, it is possible that a sherd of Phocaeen Red Slip might be so degraded as to preclude a more specific identification.) Classification by chronotype accepts that the amount of information which it is feasible to glean from a given sherd is apt to vary.

#### 1.1.2. The use of surface ceramics.

Not coincidentally, the same might be said of the nature of the information furnished by different classes of ceramics. The five functional classes I have enumerated are useful for a variety of reasons.

1.1.2.a. *Finewares*. Finewares, in the main, are precisely that: vessels made to a high level of technical sophistication and consistency.<sup>312</sup> They are also, in Mediterranean archaeological parlance, usually produced for the table,<sup>313</sup> and encompass a range of forms suitable for such use. In consequence of their status as "presentation pieces" which might be trotted out for company, they are more susceptible to the dictates of fashion than virtually any other sort of vessel, and so change more rapidly. This, in addition to the constant interest they have received, originally for art-historical reasons, means that the chronology of a form "x" can often be stated with impressive precision.

Especially in the context of survey, such precision is a *sine qua non*. Surface assemblages, Millett has observed, are unstratified, and lack the sort of inherent chronological structure which aids in the dating of excavated contexts.<sup>314</sup> They must instead be dated on the basis of their contents, among which finewares are routinely the most susceptible to close dating. By way of example, it is not atypical for forms of African Red Slip to be dated to within a half century.<sup>315</sup> A few, among them form 6A, are datable within a generation.<sup>316</sup> Then as now, careful maintenance might extend the use-life of a pot for several decades at the outside, but most probably lasted a few years before being broken or replaced.<sup>317</sup> As Morris has noted, this is "about as tight a margin as archaeologists are ever likely to get"<sup>318</sup> to experiential human time.

In addition to providing fine chronological control, finewares are useful for another reason as well: as evidence for Sicilian commerce with other regions of the

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312. As Peña (2007b: 21, n.8) has observed, this is not to say that the clay itself was necessarily very fine.

313. Cf. e.g. Hayes' (2008: 1) usage, which equates the "red-gloss and red-slip fine-ware imports generally termed 'terra sigillata,' and other tableware imports" recovered at the Athenian Agora.

314. Millett 2000.

315. E.g. forms 91A and 91B, dated to the first half and the middle decades of the fifth century, respectively: *Études* 179.

316. According to Hawthorne—who, in his Appendix Seven (1998: 266-268), provides a table of ARS form dates incorporating chronological refinements made since the publication of *LRP* and *Supplement*—6A is dated from 95-125. His suggestion of similarly brief ranges for forms 2 (70-80) and 3A (60-90) has recently been questioned by Bonifay (*Études* 156), who postulates that they may have been a central Tunisian variant of the putatively later form 3B.

317. Peña 2007b: 58-60. The author is quick to note, however, that such ranges are mostly speculative; information on the subject is much more exiguous than in the case of Roman amphorae, discussed below.

318. Morris 2000: 6.

Mediterranean. Indeed, as of the Late Roman period, finewares were almost *definitionally* imports. The mid-first century cessation of Campana C production, as made at Syracuse, marked the end of Sicily's importance as a source of fine Roman tableware.<sup>319</sup> The island was inundated with Peninsular Italian and, by the second century, African sigillata, and Sicilians' several tentative attempts to produce a local analogue<sup>320</sup> were swept before the tide. By Late Antiquity, Bonacasa Carra laments, "le conoscenze che abbiamo sulle produzioni siciliane sono tanto irrisorie quanto sconsolanti".<sup>321</sup> The socio-economic ramifications of this fact were several, and will be taken up in succeeding chapters of this thesis. But among them is surely that the presence of fineware becomes evidence of international trade, *sensu lato*.

1.1.2.b. *Lamps*. Ceramic lamps, which served in Antiquity as more or less portable sources of illumination, consist minimally in a reservoir for oil and a space for the placement of a wick to burn it. During the Roman period, however, they are also very often decorated. In light of Mediterranean archaeology's art historical beginnings, this fact helps to explain why they have historically sustained a degree of typological interest comparable to the finewares alongside which they are still occasionally published in project ceramic catalogues.<sup>322</sup> As a result, they also furnish useful information concerning chronology and patterns of trade.

1.1.2.c. *Amphorae*. Amphorae include the various ceramic containers intended for the (primarily maritime) shipping and storage of a wide variety of (primarily agricultural) products. The term—a Latin derivation of the Greek ἀμφορεύς, meaning, roughly, "two-handled", as indeed many such vessels were—could mean both the container as well as a unit of liquid measure equal to one cubic Roman foot, approximately 26 liters. It is one of the relatively few ceramic vessel names attested in the ancient sources, but its usage in modern parlance owes less to linguistic pedigree than to disciplinary convention.<sup>323</sup> Notwithstanding efforts to define the amphora in morphological terms,<sup>324</sup> it is most often employed, as here, with an emphasis on the vessels' use. In theory, this means that amphorae are distinct from the plethora of morphologically-similar jugs employed during Antiquity for table service and similar ends. In practice, so neat a distinction is difficult to uphold.

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319. There is mounting evidence for the production of thin-walled ware (reference typology: Marabini Moevs 1973) at a number of sites in Sicily during the Imperial period, but not, it seems, much past the second century: Denaro 2004. Evidence for its importation is fuller: Montana *et al.* 2003. On Campana C, Morel 1981 is basic. Concerning the commercialization of this production, which was exported en masse between the second half of the second century BCE–mid-first century CE, see Morel 1980.

320. At Morgantina and, perhaps, in the area of Syracuse and Tindari: Mandruzzato 2004: 180-181.

321. Bonacasa Carra & Vitale 1997-1998: 387.

322. E.g. Patanè & Tanasi 2006, which includes 4 ARS lamp fragments (nn. 21, 60, 106, and 109) alongside a greater number of (primarily African) sigillata vessels.

323. Indeed, it is clear that speakers of Latin made a variety of distinctions which archaeologists do not. A number of other terms were employed alongside *amphora*, among them *cadus* (pl. *cadī*) and *lagoena* (pl. *lagoenae*). The former, in general, were at the larger end of the size range, and the latter, the smaller: Hilgers 1969: 125-126, 203-205; White 1975: 127-130, 161-164. For ancient references to ἀμφορεύς, specifically, see Hilgers 1969: 99-102.

324. E.g. Grace 1961. Peacock & Williams 1986: 5 note that her criteria, which include a pointed base, would exclude a number of Southern Gaulish vessels usually referred to as amphorae.



Amphorae, as Peña<sup>325</sup> has shown, were susceptible to being recycled for a variety of uses which might have little to do the purpose for which they had been thrown. And though such reuse tends to leave its mark, the nature of ceramics recovered by survey—which tend to a relatively high level of fragmentation—makes them somewhat more difficult to catch.

That said, we must be careful not to overstate the case. Excavation and survey in the west of Sicily have made clear that substantial numbers of eastern Mediterranean and, especially, North African amphorae were being imported during the period of interest to this thesis.<sup>326</sup> Both are well-studied, the latter especially, and their petrography and shapes commensurately well-known.<sup>327</sup> When diagnostic fragments are to hand, and to a lesser degree even when faced with body sherds, a positive identification is often possible.<sup>328</sup> In such cases, two things are true regardless of the vicissitudes of an amphora's use life. First, their date ranges—often around one hundred years in the case of the North African amphorae<sup>329</sup>—are wide enough that they will remain valid indicators of the vessel's chronology. Data concerning the use and reuse of amphorae are thicker than those which concern other functional classes of pottery, and as Peña has shown, they converge on a period of usually less than a century.<sup>330</sup>

Second, particulars of an amphora's use do not change its place of manufacture, nor the fact of a connection (if perhaps at some remove) with its place of discovery. This information is arguably more useful, in economic terms, than similar data concerning the finewares discussed above. Scholars have speculated concerning the status of finewares as saleable ballast or merchandise per se,<sup>331</sup> but it is impossible to formulate a general statement of principle concerning the mechanisms by which they were distributed and sold.<sup>332</sup> Amphorae, meanwhile, "provide us not with an index of the transportation of goods, but with direct witness of the movements of certain foodstuffs which were of considerable economic importance".<sup>333</sup>

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325. Peña 2007b: 119-192.

326. Malfitana *et al.* 2008: 145-159.

327. The bibliography is in both cases extensive. Keay 1984 is basic for the study of North African amphorae. Many of the most important Eastern types—Late Roman Amphora (LRA) 1 and 2, Mid-Roman Amphora (MRA) 1—were characterized in a pair of studies by John Riley on: materials from Benghazi and Carthage, respectively: Riley 1979; Riley 1981. More recent summaries of the evidence may be found in Panella 1993 and Villa 1994.

328. To a variable degree, of course, as is foreseen in Section III.1.1.1.

329. Keay 1984: 392-398.

330. Peña 2007b: 47-56.

331. The discussion is most fully developed with respect to Greek painted pottery, with Boardman (1988a, 1988b) arguing for the intrinsic value of such wares, while Gill and Vickers (Gill 1988; Gill & Vickers 1990) sustain that they served simply to fill leftover cargo space. With regard to *Roman* finewares, the second possibility is much the likelier; as Peña (2007b: 27) observes, "[p]ottery has generally been a low-cost good in societies that have manufactured it on a routine basis, and the small amount of pricing evidence available from the Roman world confirms the assumption that it was thus in the Roman case".

332. Peña 2007b: 36.

333. Peacock & Williams 1986: 2.

1.1.2.d. *Cookpots and utilitarian vessels.* To a greater degree than is true of the preceding three cases, this class of ceramics is something of a catch-all. The existence of several well-studied and extensively-traded varieties of Late Roman cookware, noteworthy among them North African and Pantellerian varieties,<sup>334</sup> provides a compelling argument for the consideration of these vessels as a class apart. Alongside them, however, were locally-made cooking vessels which are greatly less distinctive, both in respect of their petrographic and morphological characteristics. This is especially true in the region under study, for which a comprehensive typology of local Late Roman- and Byzantine ceramics is still, as I have said, a work in progress. Under the circumstances, it is sometimes difficult to distinguish vessels meant for the *heating* of food—cooking pots, *sensu stricto*—with utilitarian<sup>335</sup> vessels which saw a range of uses in the kitchen and, often, at the table.

As a result of this typological ambiguity, the information provided by cooking and utilitarian vessels is much more uneven than in the preceding three cases. Sherds of the better-known cookwares, including the afore-mentioned North African and Pantellerian vessels, may be dated with varying degrees of precision; and insofar as their places of manufacture are known, they are useful evidence for trade. The same cannot be said for the range of local products, the value of which is much more modest. Moreover, it is difficult to generalize. The range of forms included in this category, and the variety of uses to which they could be put, resist an over-arching characterization. As such, I deal with them in each context, as they arise.

1.1.2.e. *Tile and dolia.* Typologically speaking, the consideration together of these two sorts of ceramics makes little sense. The former require little explanation, save for to note that what is specifically meant is roof tile. Such tiles constituted an integral component of the building they were intended to cover. *Dolia* (sing. *dolium*) merit a few words of explanation. The word, like "amphora", is both an attested Latin term and a conventional archaeological one.<sup>336</sup> In both cases, it describes a class of (often extremely) large fixed or semi-fixed jars designed for storage, especially of wine, olive oil, and grain.<sup>337</sup> Some were installed in merchant vessels as receptacles for the transport of wine, but most were probably used in agricultural compounds or

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334. See Chapter 4 for details and relevant bibliography.

335. Various referred to as "coarse" and "common" wares, both of which are problematic. The description of a vessel as "coarse" implies an often unwarranted judgement concerning the quality of its manufacture and/or fabric, while references to "common" ware are merely confusing: is it the frequency of the shape which is meant, or, rather, that it was employed for a quotidian purpose? Nevertheless, the latter seems less objectionable, and I employ it throughout.

336. Latin speakers appear to have distinguished between *dolia* (Hilgers 1969: 171-176), *metretae* (221), *orcae* (235-236), and *seriae* (276-277) on the basis of size, whereas archaeologists regularly employ only the first term. The equivalent Greek word—πίθος, pl. πίθοι—is often used, in Latin transcription, in periods and areas of majority Greek-speaking population. Such, as it happens, is the case in Late Antique Sicily, but I nevertheless prefer "dolium". In light of the historically disproportionate interest shown by archaeologists in (Pre-Roman) Greek Sicily, the use of *pithoi* may imply a chronology in advance of that of interest to this thesis.

337. Peña 2007b: 20 quotes a range of capacities between 400-3000 liters.

storehouses, where they might remain for decades.<sup>338</sup>

To a much greater degree than is true in the preceding cases, the use of both tiles and *dolia* implied a certain permanence in the landscape. A similar permanence may be imputed to the structures of which they formed a part. In theory, then, they should be powerful evidence for the presence of a "site" in the limited sense of a residential, industrial, or similar installation. Unfortunately, however, things are not nearly so clean-cut; see Section 1.2.2, below.

## 1.2. Aspects of ceramic quantification.

My approach to ceramic quantification was informed by practices mandated by MHS for all periods documented by the survey. As indicated above, these were as follows. Ceramics from a given DU or GCU were counted and weighed, after which they were divided into diagnostic and non-diagnostic sherd groups. Diagnostic sherds, which were classified as described in Section 1.1.1, were individually weighed and counted, the point of which was to allow for the calculation of total sherd weights and/or counts pertaining to any class or group within the chronotype hierarchy. And, finally, all these figures, were entered in the project GIS, where they could be manipulated and queried in function of various characteristics like their chronology, distribution, etc.<sup>339</sup>

Presented thus, the process of quantification is an apparently simple one. Like the process of classification, however, it entails a number of assumptions concerning which it is necessary to be explicit (as well as some problems which are specific to the analysis developed herein).

### 1.2.1. What we count for.

The first, and undoubtedly most basic, such assumption is that quantification is of any value at all. It is most usefully formulated as a question: what, precisely, are we counting? The literal answer—ceramic sherds—is as obvious as it is unenlightening. The title of this section, which echoes that of a 2000 paper by Elizabeth Fentress,<sup>340</sup> should make it clear that I mean something slightly different. Ceramic quantification is not an end in and of itself, but rather a means of approaching different aspects of the past. Fentress and Perkins, writing in 1988 on the quantity of ARS fragments recovered by three survey projects in the western Mediterranean, considered one such.<sup>341</sup> They utilize the data to discuss regional variations in the distribution of ARS vessels as a principally economic phenomenon, the explanation for which is to be sought in the vicissitudes of North African production, the interest of the state in promoting North African agricultural production and export, and similar factors. Hawthorne, meanwhile, suggests that the

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338. Merchant vessels: Aubert 1994: 260-261; Tchernia 1986: 138-140. Agricultural compounds and storehouses: Peña 2007b: 46-47. Some—called *dolia defossa*—were buried to the neck in the ground, which limited both the danger of their breaking and the space they occupied.

339. Details, see Section III.2.2–2.3.

340. Fentress 2000.

341. Fentress & Perkins 1988. The survey projects in question are the Albegna Valley / *Ager Cosanus* Survey (Attolini *et al.* 1991; Cambi & Fentress 1989; Perkins 1999; final publication as Carandini *et al.* 2002), the Monreale Survey (most recently Johns 1992), and a study of the area surrounding Cherchel in Algeria (Leveau 1984). Fentress and Perkins' argument is updated and expanded in Fentress *et al.* 2004.

distribution of ARS is better explained as a *cultural* phenomenon: the numbers reflect a change in commensal practices which, in turn, reflect the mores of a changing (and perhaps increasingly Christian) society.<sup>342</sup>

As Fentress *et al.* note, there are problems with his thesis, and indeed certain aspects of the question of the distribution of ARS are better explained as a function of economic developments.<sup>343</sup> Nevertheless, Hawthorne's approach, which is explicitly grounded in an interpretation of ceramics as material culture,<sup>344</sup> is one with which I am broadly in sympathy. The functional classes into which I have divided my ceramics, as explained in Section III.1.1.2, are useful for a variety of reasons, only some of which depend upon their value as durable indicators of commercial trends. And even in those cases—finewares, amphorae, and some cookwares—my interest is not only in what they say about the survey region's experience of Mediterranean exchange. I am also interested in *how* the fact of that experience affected the lives of the people in the area under study.

In consequence, the point of quantification as practiced in this thesis is as follows. Each of my five functional classes serves, some more directly than others, as an index of different sorts of activity. Tiles and dolia are associated with places of permanent presence in the landscape, foremost among them residences and agricultural compounds (the latter especially). Finewares and lamps were employed most consistently where people lived, and as such, are also useful indices of habitation. On the other hand, both classes are portable, and thus differ from tiles and dolia—in association with which they are *prima facie* likely to be found—in that they can also appear where human presence was more ephemeral. The same is a *fortiori* true for cooking- and other utilitarian wares. Like finewares and lamps, they were likelier to be found in the home, but their transport elsewhere—as for example into the field, by pastoralists or migrant farmers needing to eat in *rure*—is even easier to envision. Unless they were planning to stay the night,<sup>345</sup> such individuals

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342. Hawthorne 2000.

343. 2004: 150: "Hawthorne assumes that he is studying a single production of African Red Slip ware, whereas the reality is that the change in vessels is paralleled by a change in fabrics and production centers".

344. Hawthorne 1998: 29-31.

345. Which, it must be said, cannot be discounted as a possibility; modern Sicilian history is rife with examples of peasants making lengthy treks. Franchetti and Sonnino (1877: 16, translated and cited by Pluciennik, Mientjes & Giannitrapani 2004: 43), who traveled the interior of the island in 1876, observed that

The peasant, to reach the fields which he must work, sometimes has to travel 15 or more kilometers. If the distance is great, he leaves home Monday morning, and returns Saturday evening, thus losing two half-days each week: then he sleeps in the open air in the countryside, usually beneath a rough shelter of straw and branches, erected temporarily in the middle of the fields, or sometimes leant against the buildings of the central *masseria*. If instead the distance is not too great, he leaves home before dawn and returns in the evening at sunset, thus losing two or three hours of work-time each day.

Some fifty years later, Demangeon (1927: 4) mentioned peasants making twenty and even thirty kilometer "commutes": like those observed by Franchetti and Sonnino, "souvent il leur faut passer la semaine loin de leur foyer et n'y revenir que le dimanche".

need not have carried lamps. And though most fine tablewares were small enough to carry, there was little point in doing so, provided that analogous—and, as importantly, cheaper—pots were available instead. Finally, there are amphorae, which were primarily used for the transport and storage of comestibles, are similarly useful in suggesting what sorts of food were imported or produced in a given area. And because, like dolia, they were sometimes large, and heavy when full, they are most plausibly found in places of continuous presence.

All of these interpretations, needless to say, are true only in the event of primary use: amphorae, we have already observed, could be employed for a variety of purposes at some remove from their vocation as packaging containers. And insofar as I understand tiles, dolia, and to a lesser degree cooking and finewares as informative concerning activity at the place where they were found, we must assume that their place of discovery was not too far removed from their place of primary use. A long-running debate over Mediterranean manuring practices, and the possibility that discarded ceramics were spread alongside animals' spoor, is only one of several indications that such assumptions may be fraught.<sup>346</sup> The possibility of erosion, and the displacement of objects due to modern plowing, are two others. Such problems, which are in general questions of bias, do not fundamentally alter the fact that the region under survey was (among other things) a landscape of human activity in which ceramics were variously implicated, and of which they are a durable relic. In principle, the relative quantities of my five functional classes suggest some of the uses to which a place might be put, and the manner in which people dwelt therein.

#### 1.2.2. Ways of counting.

In practice, things are not so straightforward. Probably the greatest complication, in terms of doing an accurate assessment of relative functional class quantities, is one of data, specifically concerning the last of the five classes described above. Relative to their significance, tile and dolia are almost certainly underrepresented in this thesis. The problem is partially one of classification; both sorts of ceramic were slow to change, and to the degree that they did, it is often difficult to precisely date them.<sup>347</sup> As a result, it is difficult to establish with much confidence how large a percentage of the specifically *Roman* assemblage they comprise. But there is also an issue of completeness. As of this writing, I have still not received access to the *total* tile counts recorded for each Discovery Unit.<sup>348</sup> Under

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346. Such is the interpretation advanced by several scholars (e.g. Bintliff 1992; Bintliff & Snodgrass 1988; Wilkinson 1982; Wilkinson 1989) for the "haloes" of material often noted around habitation sites. (For a more recent Sicilian example, see Cambi 2005 concerning the places of "frequentazione" defined in the region of Segesta (on which see also Chapter 5, Section III.5.) The thesis has been challenged on methodological grounds by Alcock, Cherry & Davis 1994, but not, to my mind, convincingly. Indeed, as will be seen in Chapter 4, Section II.6.5, I identify such a formation in the area of Piscitello.

347. For an attempt, see Wilson 1979. Excavations have subsequently borne out several of the dates he proposed, pertinently for the "combed" tiles of broadly Byzantine date (fifth–seventh century).

348. Nor, relatedly, the cumulative sherd counts for *all* classes. At least for my purposes in this thesis, however, the latter problem is less serious than it seems on its face. The most obvious use of such figures—to characterize the significance of specifically-Roman activity vis-à-vis the other periods documented in a given area—is for a species of analysis in which I am not presently interested. This thesis is primarily concerned with variations in the intensity and nature of occupation across the

the circumstances, it is impossible to assess the relative significance of these remains in all but general terms.

With respect to the ceramics it is possible to quantify, some methodological remarks are in order. Ceramics recovered on survey represent a sample of both the population<sup>349</sup> of sherds on the surface of the survey universe as well as the population of all sherds, both superficial and subterranean, pertaining to ceramics utilized in Antiquity. And however sophisticated the sampling and collection strategies employed by the survey, the process by which finds are quantified, and pertinent statistics calculated, has an effect on the degree to which the sample is representative of the population in which we are really interested. More specifically, different methods of quantifying sampled pottery produce different sorts of systematic biases, usually by under- or over-representing certain types of ceramics. The two sorts of quantification employed by MHS—by sherd count and sherd weight—represent two of the four methods which are in principle possible. The other two are explained by Peña as follows:

3. estimated vessels represented, or EVREP (i.e., the minimum or maximum number of vessels represented, generally as can be established on the basis of one specific vessel part, such as rim, base, or handle);

4. estimated vessel equivalents, or EVE (the sum of the portions of the various vessels represented, usually as determined on the basis of one specific vessel part, such as rim, base, or handle).<sup>350</sup>

Orton, who has written extensively on the statistical analysis of ceramic data, has suggested that quantification by sherd count, sherd weight, and EVREP introduce substantial bias, while EVE does not.<sup>351</sup> The bias inherent in sherd count and EVREP measures is a result of variation, from one archaeological unit to another, in two contextual measures called index of brokenness (i.e., the number of sherds into which each vessel in a unit tends to be broken) and index of completeness (the portion of each vessel that tends to be present in a unit). These measures are a proxy, in other words, for the different formation processes, both cultural and post-depositional, which produce a given archaeological context. The bias inherent in quantification by sherd weight, meanwhile, is universal. The method tends to favor relatively heavier forms.

Ideally, it would be possible to choose from one or more of these measures—certainly including EVE, which, as noted, is free from bias—without restriction. Circumstances, however, are otherwise. Calculating EVREP and EVE, as Peña explains, is a time-consuming and difficult process,<sup>352</sup> and impractical both for those reasons and because of the nature of surface ceramics. Relative to sherds recovered by excavation, these tend to be much smaller and more abraded, which drastically

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Roman period, rather than with other phases.

349. I mean the term, here as throughout this section, in the rigorously statistical sense: that is, as the notional (and almost always unknowable) whole of all the objects, people, etc., from which a sample is drawn for purposes of statistical inference. See Shennan 1997: 50-51.

350. Peña 2007a: 154.

351. Orton 1982; Orton & Orton 1975.

352. Peña 2007a: 160.

limits their fitness for the sort of manipulation required to determine vessel equivalents.<sup>353</sup> This leaves quantification by weight and by sherd count, both of which, as I have said, are utilized by MHS. At present, however, only the latter is feasible, since I do not have access to all of the sherd weights recorded in the field.<sup>354</sup>

In partial compensation for this lack—or, maybe more accurately, by way of complement—are observations emerging from an assessment which is *not*, strictly speaking, quantitative at all. On the other hand, it is significantly more expansive. My analysis of the "Roman" sherds given me to study turned up some apparent irregularities,<sup>355</sup> which caused me to suspect that the process of preliminary sorting had introduced a measure of systematic bias into my sample. In response, I decided to make a survey of *all* the project materials, including those which had never been classified.<sup>356</sup> The outcome of this review was heartening, inasmuch as it did not seem to support my suspicions of systematic bias.<sup>357</sup> But it also confirmed that a fair amount had been missed. Owing, in part, to the pressures of time,<sup>358</sup> it was impossible to incorporate these sherds into my catalogue of the Roman finds. As such, they are also missing from the quantification on which this study depends. Nevertheless, I have occasionally made reference to this evidence, albeit once again, in basically impressionistic fashion. This is less than ideal, in methodological terms, and in a later stage of this research, I hope to formalize their inclusion. In the meantime, however, I believe the benefits outweigh the drawbacks.

### 1.2.3. Counting and the site question.

Subsidiary to the question of how to count is the question of where. Concretely, it is necessary to make a choice concerning the value—in terms of sunk time and effort, as well as expected returns—of collecting and quantifying what critics of the practice have labelled "off-site material".<sup>359</sup> Inasmuch as MHS project methodology provides for the quantification of all collected materials, my position relative to this debate was in one sense foreordained. If mine is the default position, however, it is not merely so. There are important reasons—some general, others

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353. Millett 2000.

354. Which constitutes but one of the several lacunae I was unable to fill during the period of this thesis' composition; missing tile- and cumulative context sherds counts, as mentioned above, are two others. For a comprehensive list, see Chapter 6, Section V.2.

355. Chief among them, the virtual absence of thin-walled wares of either local- or foreign manufacture. On these products, see n. 319.

356. A process which ran concurrent to my analysis of the "Roman" sherds during the 2011 and especially 2012 field study seasons.

357. Or, in any event, that such bias had not been introduced during the sorting phase: thin-walled wares were nearly as scanty among the unclassified materials as among the sample I was charged to study. It is still possible, however, that they had been missed during the process of collection in the field. Their paucity, in any event, is noteworthy, given the frequency with which these pots appear in contemporaneous Roman contexts; see e.g. Fulford & Peacock 1994: 9–15 for examples from across the Strait of Sicily, at Carthage.

358. As well as concerns for methodological consistency. When I brought the matter to the attention of Drs. Blake and Schon, they noted that my colleagues working on the Hellenistic- and Punic materials had not benefited from a second, comprehensive pass. Including such materials in my analysis would have rendered it too unlike their contributions.

359. See, among Mediterranean archaeologists, Fentress 2000; Terrenato 2000; Terrenato 2004.

specific to the project of this thesis—for refusing to distinguish between "on-" and "off-site" materials. Chief among the former is the fact that setting up a dichotomy between such classes reifies the concept of the site, the ontological status of which has been increasingly questioned.<sup>360</sup> Sites as defined by archaeologists are a modern, rather than an ancient, notion, and setting out to "find" them is tantamount to prejudging the nature and the organization of the human landscape.

Furthermore, it is to make what I think is a serious methodological error. The "sites" pursued by archaeologists are typically identified on the basis of a material signature which is particular in both its density and composition. The presence of architectural remains, among them tile, is often considered to be of diagnostic value.<sup>361</sup> In the present case, however, such criteria are problematic. Moreover, I would argue, they may preclude the perception of other loci of activity. That this is the case was demonstrated by Caraher *et al.*, who compared data produced by intensive site-based and siteless survey methodologies in the area of Kromna in the Corinthia. They found that

siteless survey is capable of revealing low-density landscapes (the Archaic pattern) hidden by site-based methods, and representing high-density scatters (the Classical pattern) with greater precision than the site...[.] A careful analysis of the siteless data reveals a more nuanced history than its site-based counterparts, with nascent settlement in the low-lying farmland between Perdikaria and Kromna expanding to the north and south in the Classical period.<sup>362</sup>

More generally, the literature is full of examples of places which are at once socioculturally significant and poor in material culture.<sup>363</sup>

That off-site material cannot be ignored, however, is not to say that "on-site" material—or, more rigorously, material notable for its density relative to the surrounding area—should be disparaged. Settlements, workshops, and agricultural installations do not exhaust the range of "sites" alluded to above, but they are important, and archaeologically visible, places of human presence and activity. It is for this fundamentally practical reason that MHS methodology foresees the definition, in the field, of such "sites", and the application of an intensified collection methodology to them. (The particulars, which include the delineation of a variable number of GCUs, are described in Section II.)

All this counting, as I said in Section III.1.2.1, is useful only insofar as it suggests something concerning human patterns of dwelling in the landscape. Arriving at such insight, however, requires further manipulation of the data. For the most part, this was accomplished in the project GIS. A description of the ways in which it was used—as well as a consideration of the principles governing that use—follows.

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360. E.g. Bintliff 2000a; Bintliff 2000b; Dunnell 1992.

361. See e.g. the assumptions made by Fentress 2000.

362. Caraher, Nakassis & Pettegrew 2006: 21.

363. E.g. Bradley 2000, who considers the extreme case of ostensibly "natural" landscapes.



## 2. Geographic Information Systems.

Pursuant to these sort of analyses, this thesis (as well as the project of which it is a part) also makes use of Geographical Information Systems (GIS) software. GIS is a suite of technologies allowing for the acquisition, visualization, manipulation, and representation of spatial data.<sup>364</sup> Components for acquiring spatial data include, but are not limited to, GPS units, cameras, and magnetic sensing units. (MHS has made use of all these, at various times.) The remainder of GIS functions, however, tend to be performed in the context of one or more software packages.<sup>365</sup> It is primarily the software component of GIS with which I am concerned here.

### 2.1. Principles and problems.

The use of GIS in archaeology dates to the 1980s and especially the beginning of the 1990s, when the first studies utilizing the technology began to be published.<sup>366</sup> Archaeologists' interest was, in some respects, a foregone conclusion. The distribution of phenomena in the landscape has been a concern of the discipline for as long as there has been a desire to locate sites on the ground, or artifacts in their context. In the Mediterranean, however, the increasing frequency of intensive off-site field survey provided a particular impetus.<sup>367</sup> Scholars were generating a hitherto-unprecedented volume of spatial data, and GIS promised a means of organizing it more easily and comprehensively than was previously possible. Moreover, it provided a means of relating archaeological to environmental data of the region under study. As Kvamme enthused in the preface to Gaffney and Stančič's classic study of settlement dynamics on the island of Hvar, "GIS and archaeology may represent an ideal marriage".<sup>368</sup>

Others, however, were less sanguine. At about the same time as GIS was added to the archaeological quiver, the rise of the post-processual critique<sup>369</sup>—primarily in Britain and so often focused on research in the Mediterranean—tended to undermine some of the assumptions which seemed to underpin it. As Given explains, "[b]ecause the easiest GIS data sets to acquire consist of topographic and environmental maps, it is all too easy to explain archaeological material solely in terms of environmental factors".<sup>370</sup> Gaffney and Stančič revisited their work on Hvar five years after its publication and, indeed, found that several of their conclusions were environmentally overdetermined.<sup>371</sup> The question of whether or not such results are unavoidable enters into a long-standing discussion concerning the

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364. Aldenderfer 1996: 4.

365. E.g. ESRI's ArcGIS software versions 9.2 and 9.3, which I have used both for managing the MHS geographic database as well those data upon which this thesis depends.

366. See e.g. Altschul 1990; Carmichael 1990; Warren 1990a; Warren 1990b. Among the earliest uses in Mediterranean archaeology was Gaffney & Stančič 1991.

367. Beginning in the early 1980s: Cherry 1983.

368. Gaffney & Stančič 1991: 5.

369. See discussion in Chapter 2, Section III.2.1.

370. Given 2004a: 167.

371. See n. 368. Full discussion of the authors' "sins of omission": Gaffney, Stančič & Watson 1996: 136-143.

epistemological status of GIS technology, which roused concerns of privileging positivism even among the community of geographers for whom it was designed.<sup>372</sup> Questions of positivism aside, it is undoubtedly true that certain assumptions, especially concerning the nature of "space", are intrinsic to all GIS. Llobera cuts to the heart of the matter:

[a]n important aspect, if not the most important one, underlying GIS techniques is their reference to an abstract, *singular* space, inert and empty, devoid of meaning and agency. Space is a medium in which human beings play out their activities. The assumption of abstract space is well illustrated by the heavy emphasis placed on the use of distribution maps in traditional spatial analysis. Most formal techniques require the study area to be represented in a bird's-eye perspective, on to which imaginary Cartesian co-ordinates with a *fixed origin* are overlaid, so it appears detached from the individual.<sup>373</sup>

Zubrow supplements these remarks by noting that the space presumed by GIS is, furthermore, a static one, from which time and temporal processes are mostly absent.<sup>374</sup> These are, in essence, the characteristics of the "abstract space" with which Tilley contrasts the "context[ual], subjective", and fundamentally "human space" for which he argues in *A phenomenology of landscape*.<sup>375</sup> The latter was influenced by—indeed inextricable from—the human experience of place. The former, meanwhile, was fired by the "white heat of positivism".<sup>376</sup>

In specific, it is difficult to argue against Tilley's diagnosis, especially as regards GIS. But the vehemence of his rhetoric, and the explicit presumption that phenomenological work could not be done in Cartesian space,<sup>377</sup> are belied by trends in archaeological use of GIS. The late 1990s and early 2000s witnessed, alongside more traditional studies,<sup>378</sup> a multiplication of efforts aimed at making GIS responsive to aspects of human "being" in the landscape. Some have suggested ways of introducing temporality into GIS.<sup>379</sup> A great many more have attempted to bring the user into the landscape, typically by modeling aspects of movement or vision. Among the former are Llobera's calculations of topographical prominence, and the way it varies as function of distance from landscape features, which highlight an important component of the experience of moving through a visible landscape.<sup>380</sup> More recent work by the same author has attempted to account for the obfuscating effect of ambient vegetation on visual perception.<sup>381</sup> Others, meanwhile, continue to

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372. E.g. Heywood 1990; Lake 1993; Sheppard 1993; Smith 1992; Taylor 1990.

373. Llobera 1996: 613.

374. Zubrow 1990: 67-68.

375. Tilley 1994: 8.

376. Tilley 1994: 7.

377. Tilley 2004: 218: "Ancient stones in landscapes...cannot be known or understood simply from publications, from maps, diagrams, photographs and descriptions, because these are only representations. As representations they necessarily fail in conveying a bodily understanding of prehistoric remains. Statistical analysis, Geographical Information Systems and simulations, are, if anything, far worse."

378. E.g. those in Billman & Feinman 1999; Bintliff & Sbonias 1999; Fish & Kowalewski 1990.

379. E.g. Daly & Lock 1999.

380. Llobera 2001.

381. Llobera 2007.

use and refine cost path analysis to model regional patterns of movement.<sup>382</sup> Under the circumstances, it is becoming increasingly hard to argue against the viability of GIS approaches to past social landscapes.

It is also true, however, that the returns on this investment of time and energy have been uneven. As yet, none of these studies has led to a wholesale renovation in methods of analysis.<sup>383</sup> Rather, "[a]s a dispassionate evaluation of the *practical* differences in approach between the two sides in this debate shows", van Leusen notes with regard to traditional and aspirationally post-processual models, "the only significant difference is in the use of 'cognitive' variables" by the latter.<sup>384</sup> It is in this context that the analyses undertaken in this thesis should be seen. In formal terms, they are relatively conventional. But as the early, if modest, success of scholars like Llobera serves to demonstrate, a considered use of old techniques may nonetheless produce new insights.

## 2.2. Visualizing distributions.

The techniques in question, to be more specific, are largely concerned with visualization. This begins, prosaically enough, with data entry. The physical landscape within which the MHS survey universe is located is described by a variety of data, the most basic of which concern the appearance of the surface and its topography. Both sorts of information were supplied by a raster layer comprising one tile of Standard, four-band color satellite imagery acquired by a QuickBird satellite and purchased by MHS from DigitalGlobe.<sup>385</sup> This raster was joined to a Digital Elevation Model (DEM), which contains information concerning the elevation and slope of the region.<sup>386</sup> The effect is to build up a digital landscape whose characteristics reflect, and for purposes of analysis serve to proxy, those of the

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382. E.g. De Silva & Pizziolo 2005; Harris 2000; Llobera 2000; Madry & Rakos 1996; Vermeulen *et al.* 2005.

383. Bellavia's "natural pathways" algorithm, and the developments it has inspired, may represent a recent exception: Bellavia 2006. On the possible utility of this and similarly innovative tools in a later phase of this research, see Chapter 6, Section V.3.

384. van Leusen 2002b: 5.5. Llobera's (2000: 72-73) attempt to model the influence of cultural features on patterns of movement is good example. He postulates, as a thought experiment, the presence in a landscape of a tomb to which travelers will be attracted; perhaps, we may guess, because visiting is good luck. Specifically, he assumes that the presence of the tomb imposes a "cost"  $c(di)$  on movement, at all places  $i$  from which the feature may be seen, which decreases linearly with proximity to the tomb:

$$c(d) = \frac{-\text{magnitude}}{d_{\text{max}}} (d + \text{magnitude})$$

where "magnitude" is the rank of the tomb, in respect of its importance as a factor influencing movement, vis-à-vis other variables affecting cost. The author also provides equations for cost influence modeled as decaying at an exponential rate, "when the effect of the monument is felt only at a very close range", and as a stepwise function where "the full impact of the feature (i.e. all its magnitude) is felt within the immediate surroundings of the feature": Llobera 2000: 74-75.

385. Standard imagery products are provided with embedded geographic positional data—as reckoned, in the case of the image utilized by MHS, in the UTM coordinate system on the basis of the WGS1984 datum and spheroid—which obviates the need to manually locate the image in Cartesian space.

386. As acquired free at <http://www.sinanet.isprambiente.it/it/sia-ispra/download-mais/dem20/view> [accessed October 3, 2012], with a resolution of 20 m.

physical space of which it is a model. It is within this space that information generated by the survey is located.

Such information includes, first of all, the areas which have in fact been surveyed. DUs and GCUs are represented by several layers of polygon Shapefiles, the definition of which begins in the field. A hand-held GPS unit, accurate to  $\pm 4$  m and set to the coordinate system utilized by the project GIS, was used to record a series of at least five<sup>387</sup> points corresponding, in order, to the NE, SE, SW, and NW corners of the unit. The fifth corresponds to the centroid, or presumed center of the survey unit. These five points were entered in the project GIS as a point Shapefile, and, on the basis of comparison with a sketch made in the field, the unit borders were drawn. (The purpose of the sketch, which was not made to scale, was to allow for correction of the putative unit borders on the basis of comparison with the landscape visible in the satellite image.<sup>388</sup>) These borders define the polygons referred to above, which are grouped as layers corresponding to each of several areas surveyed. These are eight in number. Units in the areas of Borso, Genna, and Marcanzotta were surveyed during the 2008 field season, and those at Timpone Granatello, Casa Abbadessa, and Piscitello were walked in 2009. San Leonardo was a target of research during both seasons. Information concerning the artifacts collected in each survey unit is then linked to the relevant polygon.

As explained in Section III.1.2.1, I view these remains as proxies for various sorts of historical presence and behavior. Their distribution is related, albeit incompletely, to aspects of human dwelling in the landscape. Mapping the density of e.g. finewares versus cooking wares, or Early Imperial ceramics against those of a Late Roman date, may suggest the existence of patterns which can subsequently be interrogated in light of a variety of characteristics. The process of doing so is as follows. Sherds counts for each of my five functional classes, which are recorded at the level of the DU or GCU, are standardized as a measure per Hectare.<sup>389</sup> The densities which result are useful for a variety of purposes. First, they allow for the comparison of results between survey areas—and, by more or less imperfect proxy, the landscape in which they are situated.<sup>390</sup> And second, they provide a window into

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387. The delineation of DUs coincident with modern agricultural fields, as per MHS project methodology, resulted in the definition of several with irregular polygonal outlines. In such cases, points were taken at every angle.

388. This practice allowed for the correction of a peculiar sort of research bias identified by van Leusen 2002b: 4.11-4.12. He explains: "the raw counts and weights per collection unit resulting from a survey will be 'normalised' to account for any differences in the size and coverage rate of the collection units. It was found during analysis of the Ostuni survey data...that the digitised areas of many collection units were approximately 10% smaller than those mapped in the field on topographic maps at scale 1:10,000", which discrepancy was in turn reflected in the standardized measures of density.

389. A procedure which, it is worth noting, is not without its problems, notwithstanding its necessity. The reason is to be found in the so-called "modifiable areal unit problem (MAUP)", which states that patterns observed in spatially aggregated data are influenced by the process and scale of aggregation: Amrhein 1995; Frotheringham & Wong 1991; Openshaw 1984. Bevan and Connolly's (2009: 957) solution—to work exclusively from walker transects of similar size—is not feasible in the present case, as only in some instances were MHS counts kept separate at the level of the tract. Correcting for the bias introduced on this account is, without a doubt, a desideratum, but not one I effect at present.

390. For a discussion of the ways in which MHS survey areas relate to the region of the project's activity, see the discussion of individual areas in Chapter 4.

the patterning of finds across a *given* area. To the degree that any trends can be discerned therein—are the finds especially numerous? Are they dispersed, or do they cluster in an appreciable way?—this is noted, both with respect to group of all Roman sherds and, subsequently, the remains belonging to each of the classes described above.<sup>391</sup> Where discrepancies exist between the number or distribution of these groups—either between the collection of all sherds and some subset thereof, or between different functional groups—these are signalled.

As will be clear in the following chapter, GIS is a significant aid to visualizing these sorts of relationships. It is also, however, useful in contextualizing them. The ready availability of topographic information, as contained in the project DEM, makes it easy to determine whether the patterns observed in the material can be mapped onto variation in the natural environment, or, conversely, other explanations need be marshalled.

### 2.3. Assemblage chronology.

It is not only find patterning which is amenable to visualization via GIS. The second major use to which I have put the software is in assessing the chronology of each surveyed area, a graphic characterization of which—or, in the terms employed in this thesis, a "histochronology"—serves to anchor discussion of that area's history. These histochronologies are generated by means of a process which was inspired, both in general concept and in certain particulars, by Fentress and Perkin's analysis of trends in ARS production and distribution.<sup>392</sup> Their discussion of fluctuations in the supply of ARS over time, as represented by several published corpora of sherds from survey,<sup>393</sup> lit upon a novel way to integrate the information provided by sherds with chronologies of significantly variable length:

This was achieved by considering the date range of each form as a continuum, and assuming that there was an equal probability that a pot was made in each year of this range. Thus a pot with a date range of 100 years was assigned a probability of 1/100 for each year of production. In order to calculate the total frequency of production this figure was multiplied by the total number of pots in that type: 200 sherds of in [*sic*] the same form would thus give a probable distribution of two pots per year. A histogram was then constructed for each of the samples of pottery under consideration, and the totals averaged to create a graph which should give some approximation of the relative frequencies of the total production.<sup>394</sup>

The utility of this procedure, for our purposes as well as those for which it was

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391. With, again, the exception of tile/dolia.

392. As outlined in Fentress & Perkins 1988. This treatment was updated and expanded in Fentress *et al.* 2004.

393. Viz., the Albegna Valley/Ager Cosanus survey (2140 sherds, which, insofar as I can determine, remain unpublished; Carandini *et al.* 2002 does not include a discussion of the Roman ceramics); the Monreale Survey (2006 sherds; discussion and bibliography, see Chapter 5, Section II.3); and Philip Leveau's survey of Cherchel, in Algeria (1040 sherds: Leveau 1984: 452). The authors also consider two corpora of unstratified sherds from excavation: a group of 1291 fragments from Tiberius' villa at Sperlonga (Sagui 1980: 471–490) and a further 1393 from Valencia, Spain (Reynolds 1984). For the project corpora added in Fentress *et al.* 2004, see p. 147, *Ibid.*, with bibliography.

394. Fentress & Perkins 1988: 207–208.

originally conceived, should be clear. Like most of the sherds considered by Fentress and Perkins, the materials recovered by MHS *also* constitute a corpus of finds from survey. And the decision to attempt a classification by chronotype, as explained above, means that we must also confront the problems occasioned by different degrees of chronological specificity. This is not to say that process is free of difficulties. As the authors acknowledge, the assumption that a given example of form "x" was equally likely to have been manufactured during every year of its chronology is very possibly false. It is also, however, a *useful* assumption (as well as one which is difficult to improve upon, failing more specific information concerning the vicissitudes of individual forms' production histories).<sup>395</sup>

A second caveat, meanwhile, is specific to this thesis—or more to the point, the different ends to which I am putting Fentress and Perkins' method. The purpose of their analysis, as already mentioned, was to characterize a history of *production*. To this end, the form chronologies they employ are precisely the right sort of data. My aim, meanwhile, is to characterize a history of *occupation*. Insofar as the ceramic evidence is concerned, this means a history of their use—which, in principle, may not necessarily be contemporaneous with the period of their production. In practice, however, I do not believe this problem is insurmountable. The majority of the forms on which I depend for chronological information are finewares, which, though they might be retained by more than one generation, are unlikely to be repurposed. The same cannot necessarily be said for the amphorae, but as already explained, experiments indicate that even the possibility of secondary use does not significantly extend the chronology a given amphora.<sup>396</sup>

With regard to those chronologies, a few remarks are in order. The treatment of forms with a chronology expressed as a numerical range—for example, ARS form Hayes 3 B, which Hawthorne places between 75–150<sup>397</sup>—is in keeping with the explanation provided by Fentress and Perkins, above. The use of chronologies expressed in prose, meanwhile—as for example that of the Spatheion 1 amphora, which Bonifay dates to the "première moitié et milieu du Ve s."<sup>398</sup>—is a little less straightforward. In order to make use of such ranges, they first need to be converted into a numerical equivalent. Where possible, I have made use of authors' comments in fixing the ranges they give in prose, but many more are essentially arbitrary. The upshot of this, of course, is that they are also consistent, such that any possibility of misrepresentation is not confined to a single form. Table 1 provides examples of all these adjustments, as well as the ways in which they interact.

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395. Fentress & Perkins 1988: 207, n. 12. As the authors note, "an experiment of randomizing the frequency data demonstrates that our histograms do not simply reflect the date-ranges of individual forms".

396. Section III.1.1.2.c.

397. Hawthorne 1998: 266. Hawthorne's Appendix Seven, which comprises a table of ARS form dates incorporating chronological refinements made—principally by Fulford & Peacock 1984, Mackensen 1993a; Mackensen 1993b and Reynolds 1995—since the publication of *Late Roman Pottery* and its *Supplement*—is one of the sources on which I have depended for the chronologies employed in this thesis. The others include Bonifay 2004, which constitutes the latest word on select North African fine-, utilitarian-, and cookwares, as well as amphorae; Santoro Bianchi 2003, on Pantellerian cookware; and others. A full accounting is provided in the bibliography.

398. Bonifay 2004: 125.

Range in prose	Numerical range	Length of interval	Probability of manufacture per year	Remarks
Fourth century CE	301–400 CE	100	0.01	
First half of the " "	301–350	50	0.02	
Second half of the " "	351–400	50	0.02	
End of the fourth–beginning of the fifth century	386–415	30	0.033 <sup>399</sup>	I have interpreted "beginning" and "end" to mean a period closer to the outset and the conclusion of a given century, respectively, than "early and late"; see below.
End of the fourth–first half of the fifth century	386–450	65	0.015	
End of the fifth–end of the seventh century	486–700	215	0.005	When "end" dates are used at the end of range, I take them to include the entirety of the century to which they refer
Middle of the fourth century	336–365	30	0.033	Interpreted, essentially, to mean the middle decades of the century in question
End of the fourth–middle of the fifth century	386–465	80	0.013	
Late fourth–middle of the fifth century	376–465	90	0.011	
Late fourth–early fifth century	376–425	50	0.02	

Table 1: Translation of prose chronologies.

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399. Or, more accurately, 0.033... (repeating). The value given in the table is an approximation, to three significant digits, of both the precise value—equivalent to  $1/30$ —and, more importantly, that which is actually used in the generation of a given histochronology. This is because the latter is calculated, not by input values, but rather input formulae. The field corresponding to the probability of manufacture per year, entitled Prob\_Annum, is populated on the basis of a field calculation equivalent to  $1/[\text{Length of interval}]$ . Similar remarks apply to non-terminating, non-repeating decimals, which are here reduced for legibility.

A separate class of adjustments concerns the "regnal" chronologies often employed in the discussion of early Imperial Roman ceramics. By way of example—the rest may be found in the cumulative chronotype database file—I present the translation of "Augustan" period dates:

Period	Numerical range	Length of interval	Probability of manufacture per year	Remarks
Augustan period	27 BCE–15 CE	42	0.024	The period of Augustus' reign (27 BCE–14 CE) has been lengthened by a year in order to facilitate the subdivision of the period into the "early", middle", and "late" phases often referenced by ceramicists. <sup>400</sup>
Early Augustan period	27–14 BCE	14	0.071	
Middle " "	13 BCE–1 CE	14	0.071	
Late " "	2–15 CE	14	0.071	

Table 2: Augustan-period chronologies.

The inclusion of such early pieces poses a further problem. As mentioned previously, the research in this thesis is based primarily on materials of first-century CE and later date. In keeping with this focus, the histochronologies I have created begin after the change in era. For the purposes of their generation, materials whose chronology is earlier—as for example those from the early- and middle Augustan periods—are not included. Their effective probability of manufacture per year, in other words, is not the 0.071 recorded above; it is, rather, zero.

Following these adjustments, the histochronology is generated. The process is much like that outlined by Fentress and Perkins: the probability of manufacture per year for each of the forms present a given survey site are weighted by number of sherds, and these weighted quantities are then visualized as a continuous vertical bar graph. This graph, in turn, serves as a springboard for the discussions found in the next chapter.

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400. Most pertinently, by the authors of the *Conspectus*, who date e.g. Italian Sigillata plate form 12.4 to the middle-late Augustan period: *Consp.* 72–73.



## CHAPTER 4. INSIGHTS FROM SURVEY

## I. Introduction.

In this chapter, I set out the results of my analysis of Roman settlement in the area under study by MHS.<sup>401</sup> Over the course of two field seasons (2008–2009), project participants surveyed eight distinct areas. The total surface area of Borso; Casa Abbadessa; Ditta Barbagallo; Genna; Marcanzotta; Piscitello; San Leonardo; and Timpone Granatello<sup>402</sup> is c. 55 Ha. This is equivalent to less than half a percent of the

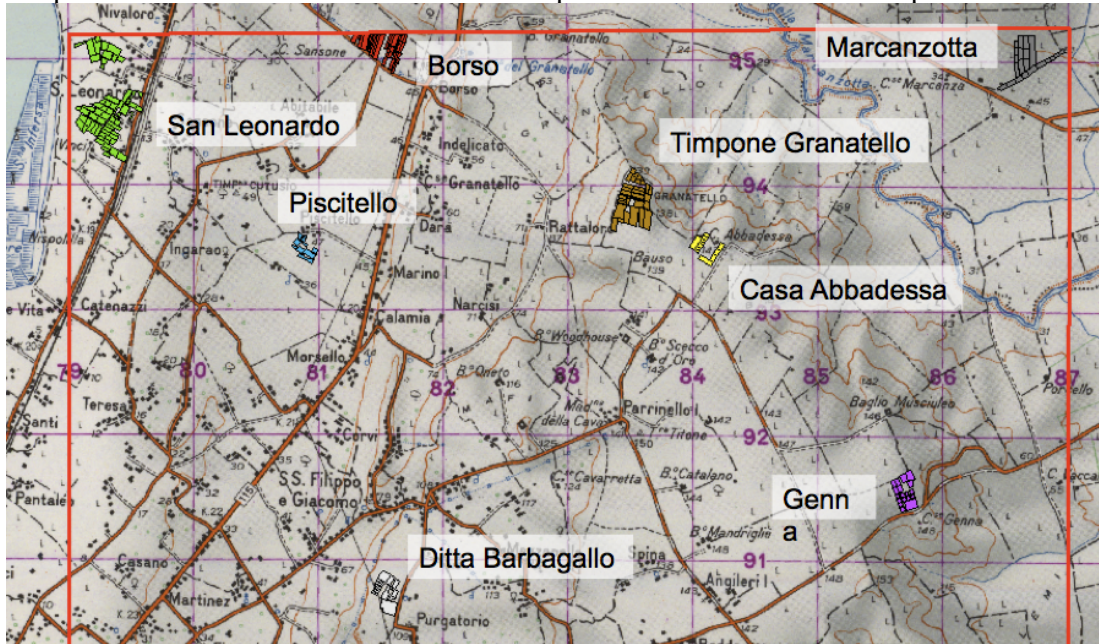


Fig. 3: MHS survey areas.

area in which MHS was permitted to work. Moreover, they are all located in the northern third<sup>403</sup> of the survey universe (Fig. 3). As such, they lie some distance to the north of the city for which MHS was named.<sup>404</sup>

Of the four areas designated for survey during the 2008 field season, three—San Leonardo, Borso, and Marcanzotta—lie on the very northern edge of the MHS survey universe.<sup>405</sup> More pertinently, they lie at more or less the latitude of the island of Mozia, which, during the period of greatest interest to the MHS project leadership, hosted an important Phoenician entrepôt.<sup>406</sup> As such, it was a potential interlocutor for the indigenous peoples settled on the mainland. The selection of three survey areas stratified by distance from the coast (Fig. 4)—which constitutes, arguendo, the place of most probable interaction between Phoenician and native—was intended to

401. For a fuller characterization of the 112 km<sup>2</sup> project survey universe, see Chapter 1, Section II.1.

402. See individual area sections for the origin of these names as used by MHS.

403. Almost exactly. The minimum rectangle bounding all eight sites occupies approximately 33% (total area, c. 37 km<sup>2</sup>) of the 112 km<sup>2</sup> which MHS was permitted to explore.

404. The southernmost area surveyed—Ditta Barbagallo, on which more below—is some 3.5 km north of the city's Roman core.

405. The fourth, Genna, lies a little more than 3.5 km south-southwest of Marcanzotta; see Section 4.1.

406. See Chapter 1, Section II.2.

assess the degree and significance of Phoenician penetration in the region under study.<sup>407</sup> San Leonardo, which is located a scant distance from the shore, is the most

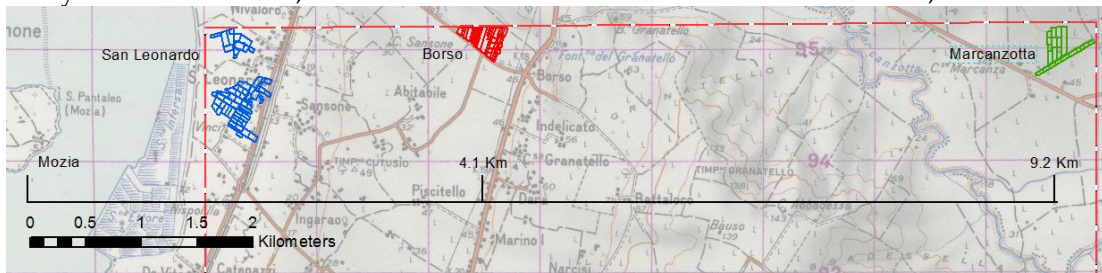


Fig. 4: San Leonardo, Borso, and Marcanzotta, in order of increasing distance from Mozia.

The broken red line delineates the border of the MHS survey universe.

proximate of these areas, while Borso and Marcanzotta lie at progressively greater removes. These locations, in turn, correspond to a variety of different landscapes. San Leonardo is located on land which is now a fertile coastal plain, but which was, in the past, more probably a region of marshes and dunes.<sup>408</sup> Borso and Marcanzotta, meanwhile, occupy different parts of an extensive inland alluvial plain. Borso is located in a region which, while higher than the neighborhood of San Leonardo, is in other respects (land-use and topography, especially) quite similar. It is also intervisible with San Leonardo, while Marcanzotta is not. The latter area lies near the banks of the Marcanzotta River, to the east of a large, low-lying plateau which runs north-south through the eastern third of the survey universe. The fourth site surveyed in 2008, Genna, is actually located on the eastern edge of this plateau, but at some distance to the south of the three areas just described. It was designated for survey on the basis of the density of finds noted during preliminary exploration of the area.

During the 2009 field season, MHS was active in five areas. One of these—San Leonardo—had previously been surveyed, but the variety of finds was such that the project directors decided to expand the surveyed area. The other four were new. Two of them were chosen for reasons similar to those operative in the case of Genna. Ditta Barbagallo, which lies on the western edge of the plateau opposite Genna, was brought to the project's attention by a local landowner, who witnessed a group of clandestini removing antiquities from his property. Piscitello, which lies on the alluvial plain a scant 1.7 km south of Borso, was noticed during an extensive survey of the region. Like Genna before it, it stood out for the markedly higher density of surface finds.

The other two, Casa Abbadessa and Timpone Granatello, lie adjacent to one another midway between Borso and Marcanzotta, if a little bit further south. They were selected for methodological reasons. Owing to their location on the northeastern edge of the plateau, they are characterized by higher elevation, and more varied topography, than most of the other areas under study.

407. Or its material cultural adjuncts, at any rate. Blake & Schon 2010: 51.

408. This and other regions of the project survey universe are more fully described in Chapter 1, Section II.1. The characteristics of each survey area, meanwhile, are detailed in the first subsection of each area summary, as explained below.

In the following section, each of these areas is treated, separately, according to a formula designed to facilitate comparison. The discussion of areas with evidence of occupation during the period of this thesis is structured as follows:

**A. Survey area name**

1. **Location and characteristics.** A brief description of the area in which survey was undertaken. This includes:
  - a) Background regarding the area's name, as employed by the project
  - b) Local topography, including elevation
  - c) Location, specifically in relation to:
    - (1) Noteworthy features
    - (2) local settlement
    - (3) other areas surveyed by MHS
  - d) Land use, both in general and, when possible, with respect to individual fields
2. **Survey.** A summary of the work undertaken by the project. This includes:
  - a) An explanation of the factors motivating the area's designation for survey
  - b) Time and duration of project activity
  - c) Extent of the surveyed area
  - d) Specifics regarding its partition into Topographical Units
  - e) The number of finds catalogued as pertaining to the period of this thesis
3. **Quantification and intra-areal distribution.** An analysis of:
  - a) Finds as distributed across the surveyed area
  - b) The shape of this distribution, provided it can be characterized. (Do the finds cluster, and if so, where? Or are they more evenly dispersed?)
  - c) Factors which might have produced this distribution, or, alternatively, altered it post-deposition
  - d) In consequence of this last, possible under- or overrepresentation of certain areas
4. **Chronology.** A characterization of the area's chronology of occupation, including:
  - a) An enumeration of dateable sherds and the chronotypes<sup>409</sup> to which they belong
  - b) A graphic "histochronology" of these finds, representing the relative frequency of evidence from each period
  - c) Discussion of the chronology this graph suggests, and the ways in which it may under- or overrepresent certain periods
  - d) An analysis of what this (corrected) chronology might suggest concerning the development of activity
5. **Function and use.** A discussion of finds according to their functional class,<sup>410</sup> and what, if anything, they suggest concerning the uses of the area of their discovery. This includes:
  - a) An analysis of the distribution of finds according to their functional class
  - b) An examination of the ways in which individual functional class distributions differ (if indeed they do)

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409. On which see Chapter 3, Sections III.1.1.1 and III.2.2.3.

410. Chapter 3, Section III.1.1.1.



- c) Possible explanations for these differences
- d) In light of the above, theories regarding the nature of activity in the area under consideration

Areas without significant evidence for Roman-period activity are treated more succinctly. The final three subsections ("Quantification and intra-areal distribution"; "Chronology"; "Function and use") are replaced with a single one, entitled "Summary of findings".

In Section III, "Synthesis", I take a wider view. This discussion is divided into three categories. In "The numbers", project finds are treated as portable indices of chronology and trade, specifically as it involved the hinterland of Marsala. "Ceramics and settlement history", meanwhile, considers them in their regional context. Here, I synthesize observations made concerning the occupation of individual survey areas, as presented in Section II, to trace the evolution of settlement in the region as a whole. The chapter concludes with "The geography of settlement", which considers the ways in which the physical characteristics of the landscape under study may, or may not, have influenced the development of local settlement.

## II. Survey areas.

### 1. Borso.

#### 1.1. Location and characteristics.

"Borso", as used by MHS, is a toponym referring to a group of adjacent fields located on the north side of provincial road SP1 at a distance of less than half a kilometer from Contrada Granatello<sup>411</sup> (Fig. 5). The surveyed area, which lies at an

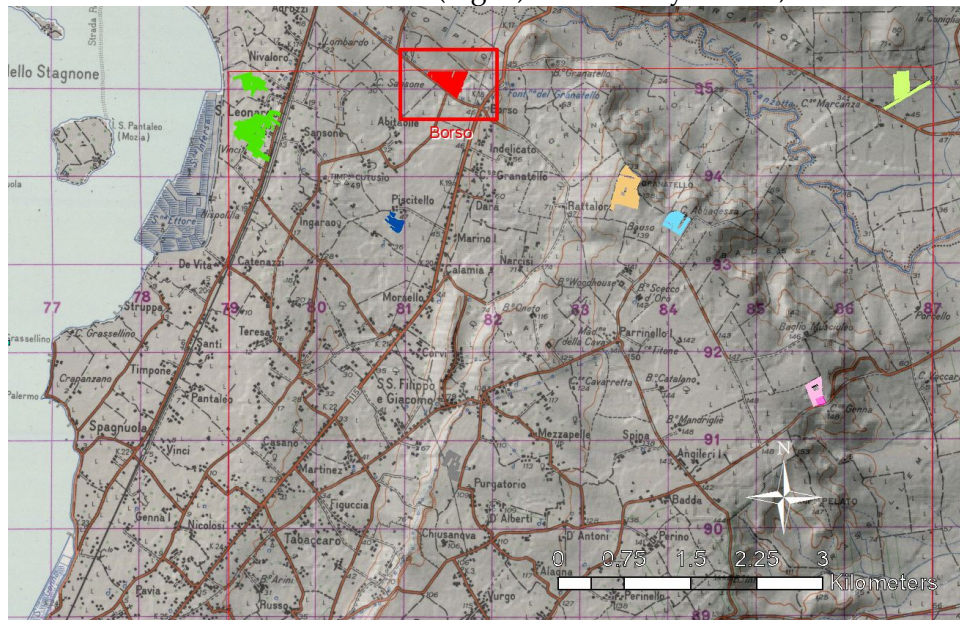


Fig. 5: Borso location.

411. Which, per the 1:50,000 Carta d'Italia prepared by the Istituto Geografico Militare (IGM) (1974)—hereafter "CdI"—appears to have previously borne the name "Borso". This is the source of the toponym employed by MHS.

elevation of c. 30–40 m asl,<sup>412</sup> is typical of the flat, fertile coastal plain in which it is situated.

With respect to the other areas explored by MHS, Borso lies a little more than 2 km east of San Leonardo (and, thus, about 2.5 km from the shore of the Stagnone) and approximately 1.5 km north-northeast of Piscitello. As in the latter case—but unlike at San Leonardo, where modern settlement surrounds, and occasionally intrudes upon, the fields walked by MHS—Borso is a place of cultivation, rather than habitation. Indeed, there is very little modern construction of any sort. The only notable exception is a network of unsurfaced roads intended to facilitate tractor access to fields removed from the road.<sup>413</sup> The majority of these fields are planted with wine grapes, while a smaller number, all of which are located at the eastern edge of the survey area, are planted with olive trees.<sup>414</sup> A further few lay fallow.<sup>415</sup>

## 1.2. Survey.

Survey at Borso was undertaken for a period of three days in July, 2008.<sup>416</sup> In



total, project participants walked some 7.5 Ha. The latter comprised thirty-four DUs (1013–1046; see Fig. 6), most of which are coterminous with modern fields.<sup>417</sup> Virtually none of the ceramics recovered from these units, however, pertain to the period of interest to this thesis. In all, only six tract sherds

Fig. 6: Borso survey units.  
were catalogued as Roman.

412. Or, to be exact, between 27–44 m asl. In this and subsequent cases, the minimum and maximum elevation are those recorded in an area defined by the minimal bounding rectangle for all Topographic Units (TUs) on site. (For significance of this term, as well as its further subdivision into three different classes, see Chapter 3, Section II.)

413. Two other features are worth mentioning. A stone wall separates the field corresponding to DU 1043 from DU 1044, to its south. Further west, in an uncultivated 0.08 Ha plot located between DUs 1013, 1014, and 1015, are stones marking the footprint of what might either have been a cistern or an outbuilding.

414. Viz., the fields corresponding to DUs 1033, 1034, 1037, 1038, 1043, and 1045.

415. E.g., those corresponding to DUs 1024, 1028, and 1035–1036.

416. DUs 1013–1032 were walked between July 7–9, and DUs 1033–1046, on July 23.

417. A handful of the larger fields were subdivided into two or more DUs. Such was the case with respect to the fields containing e.g. DUs 1029–1032. In a smaller number of cases, meanwhile, two or more fields were included in a single unit (e.g. DU 1020).

### 1.3. Summary of findings.

In view of this extreme paucity, it is difficult to avoid the obvious conclusion: that broadly "Roman" activity in the area of Borso was commensurately rare (if not simply absent). Nor is this impression very much undermined by a consideration of the six pieces in question. Two are fragments of African cookware, which, by virtue of its lengthy history of production and trade, is at best an imprecise chronological guide.<sup>418</sup> Much the same could be said of a single documented fragment of what appears to be the wall of an African amphora. The remaining three, meanwhile, belong to the period preceding that with which this thesis is primarily concerned. Two are fragments of amphorae, and pertain, respectively, to an Italian Dressel 2–4 and what was likely either a late Greco-Italic or early Dressel 1 container.<sup>419</sup> And the last is a fragmentary base belonging to a vessel whose fabric and form (insofar as the latter is discernible) situate it within the series of locally-made Late Republican–Early Imperial table wares mentioned elsewhere in this thesis.<sup>420</sup> To the degree that such scanty remains are evidence for some (infinitesimal, or transient, or archaeologically invisible) Roman-period activity in the area, it was limited to the earliest phase of that period.<sup>421</sup>

Whatever the factors which acted to limit human presence at Borso during the period of this thesis, however, it is worth noting that their relevance must at some point have faded. In light of the virtual absence of ceramics from the Middle Roman–Early Medieval period, the number of apparently-later remains is all the more notable. A full accounting of the sherds in question—which include, *inter alia*, some (late?) Medieval– and Early Modern pieces—lies outside the scope of this thesis. If my impressions are correct, however, Borso did not remain uninhabited forever.

## 2. Casa Abbadessa.

### 2.1. Location and characteristics.

The area of Casa Abbadessa<sup>422</sup> comprises a group of agricultural fields found in the northeastern part of the MHS survey universe (Fig. 7). It is located some 3 km

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418. See discussion in Section 6.4.

419. The former was manufactured between c. 70 BCE–early third century CE, but its period of regular export—and, thus, greatest likelihood of arrival on Sicily—ended after the first century CE. With regard to the latter fragment, the combined chronology of these two forms gives a span of c. 260–c. 10 BCE. This period encompasses the chronology of the latest Greco-Italic forms—Will's (1982) 1 D (260/240–220/210 BCE) and E (late third–mid second century BCE; both forms' chronology in keeping with corrections made to Will's dates by Empereur & Hesnard 1987; Manacorda 1989; Tchernia 1986; Vandermersch 1994)—and the Campanian production of Dressel 1 (subtypes 1 A and B), which date from 140/130–last decade of the first century BCE: Hesnard *et al.* 1989; Peacock 1971; Peacock 1977b; Tchernia 1986.

420. See n. 593, below.

421. Which would not be entirely without precedent. As noted below (Section III.2.1.1, with n. 625), continuity between the Punic–early Roman phases—and, sometimes, a rupture between the Republican– and Imperial periods—have been attested elsewhere in western Sicily.

422. Or, rather, "C. Abbadessa", as identified on the *CdI*. The full name appears on the more recent (2007–2008) 1:10.000 scale Carta Tecnica Regionale Siciliana, hereafter *CTR*.



to the east of Piscitello, which lies at approximately the same latitude (both are situated c. 1.75 km south of the MHS survey universe's northern limit). The area of Timpone Granatello,<sup>423</sup> which lies less than half a kilometer WNW of Casa Abbadessa, is the nearest of the other areas surveyed by MHS. The nearest modern settlement, the frazione of Rattaloro, is located a little less than 1.5 km to the west. All three sites—Rattaloro, Timpone Granatello, and, most pertinently for our purposes here, Casa Abbadessa—are situated atop a plateau which rises some 100 m asl at its western edge. Casa Abbadessa, the altitude of which ranges from 128–

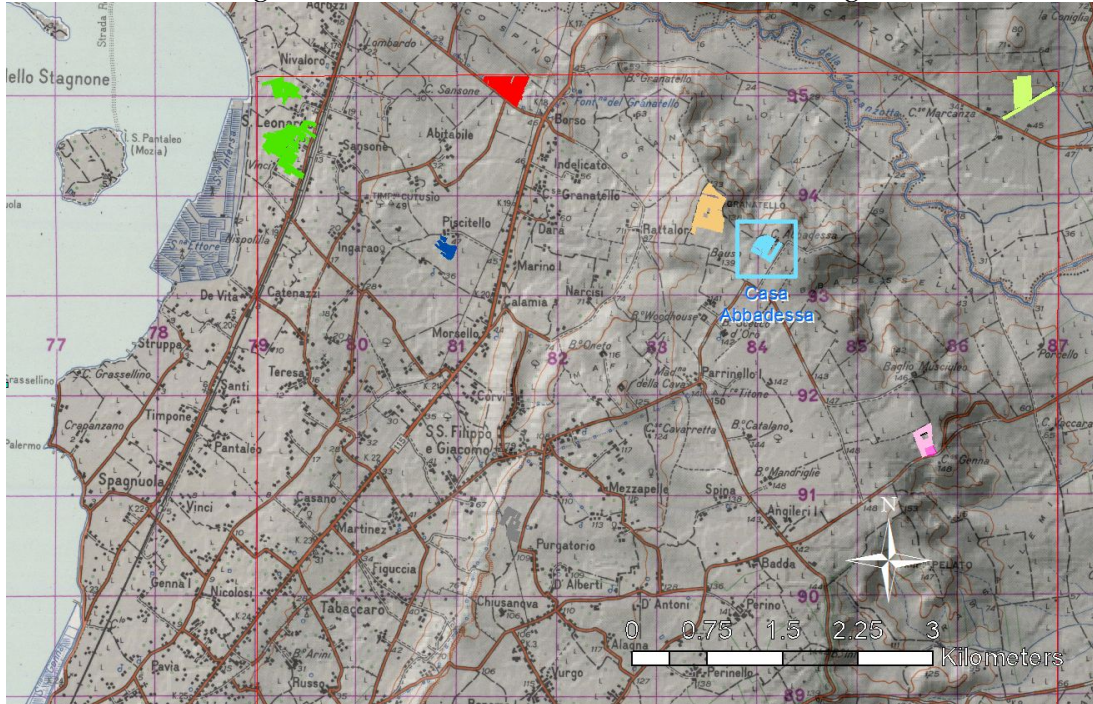


Fig. 7: Casa Abbadessa location.

143 m asl, is the highest of the three. It is also the highest of the areas surveyed by MHS.

Its altitude notwithstanding, Casa Abbadessa is otherwise typical of the areas explored by the project. As in the most of cases considered in this chapter,<sup>424</sup> it is located in more-or-less uninhabited agricultural land. (A mere seventy people reside in Rattaloro.<sup>425</sup>) And a majority of the surface area—indeed, all of it—is planted with wine grapes.

## 2.2. Survey.

Survey in the area of Casa Abbadessa was undertaken for two days (June 18–19) of the 2009 field season. During that time, MHS project participants explored a total of twenty Discovery Units,<sup>426</sup> comprising some 3.52 Ha in cumulative surface

423. Details, Section 8.1.

424. but cf. San Leonardo: Section 7.1.

425. Thus [http://italia.indettaglio.it/ita/sicilia/trapani\\_marsala\\_rattaloro.html](http://italia.indettaglio.it/ita/sicilia/trapani_marsala_rattaloro.html) [accessed August 2, 2015].

426. Which, however, occupy fewer than twenty of the modern fields in which they lie. Indeed, only three of the units defined by MHS (2149, 2150, and 2151) are coterminous with modern fields, and then only mostly. The remaining DUs, meanwhile, comprise a series of three approximately equal

area (Fig. 8). These twenty DUs were numbered 2132–2151 in continuation of the series established at Timpone Granatello (on which see Section 8.2, below).



Fig. 8: Casa Abbadessa survey units.

Grosso modo, the density of broadly-Roman finds at Casa Abbadessa was relatively low: only 107 such sherds were catalogued. They are discussed in the following section.

### 2.3. Quantification and intra-areal distribution.

Before embarking on a discussion of the contents of this corpus, however, it is worth noting what it does *not* include: a not-insignificant

number of items which were either extremely fragmentary, typologically conservative, or both. It stands to reason, for example, that some of the roof tiles discovered in the area are of Roman date, but we cannot easily establish which, or even how many. As such, it can safely be assumed that the corpus of "Roman" ceramic materials, at least as presently constituted, is incomplete. The quantity with which we are left is undeniably modest, but it is sufficiently large to allow for some (relatively broad) discussion of spatial patterning.

Among the most important facts regarding the distribution of finds recovered at Casa Abbadessa is that it is notably uneven (Table 1, Appendix 1). Of the 107 sherds under discussion, some 67% (=72 sherds) were recovered from the adjacent DUs 2139–2142. Needless to say, this is a significant concentration of finds. But it is less extreme than that observed at e.g. Piscitello, where 95% of the documented finds were observed to come from three contiguous DUs (apparently continuous), and the remaining 5%, from four of the remaining twelve. Fully seven seven of the twelve DU at Piscitello reported no tract finds at all.<sup>427</sup> At Casa Abbadessa, meanwhile, only one DU (2149) was similarly unproductive. All of the others reported between 1–5 sherds pertaining to the period under discussion. Insofar as the numbers are concerned, this is a thin, but apparently pretty even, distribution. As regards the

subdivisions of what the *CTR* suggests are actually two fields. (DUs 2132–2138 and 2139–2145 are in one field, and DUs 2146–2148 are in another.)

427. Details, see Section 6.3. Because I do not currently have access to data regarding tract-level patterns of distribution, it is impossible to determine whether the scatter in DUs 2205, 2206, and 2207 was in fact unbroken. This is a question I expect to answer, going forward, however.



spatial patterning of these sherds, however, the situation is a little more complicated (Fig. 9).



Fig. 9: Casa Abbadessa tract find densities (sherds/Ha). Greater densities are darker.<sup>428</sup>

First, it is worth noting that the area of greatest artifact density—viz., the aforementioned scatter at DUs 2139–2142—is locally distinctive. In the first instance, it is geographically central. The surface area comprising units 2139–2142 is located, more or less, in the middle of Casa Abbadessa. But it is central in another respect, too. Per Fig. 9, there is a perceptible clustering of the relatively-more-productive units (esp. DUs 2132, 2133, and 2135) in the immediate vicinity of DUs 2139–2142. Grosso modo, sherd counts decrease as one moves away from the distribution's center of gravity.<sup>429</sup>

Among the factors influencing this pattern of dispersion, furthermore, is another distinctive feature. The unit in which Roman finds are densest, DU 2139, is also the unit at the highest altitude (143 m asl). As may be seen in Fig. 10, it sits at the southwestern edge of the hillock on which the modern "C. Abbadessa" rises. The remaining twenty-one units, meanwhile, are all downhill of this point. In these sorts

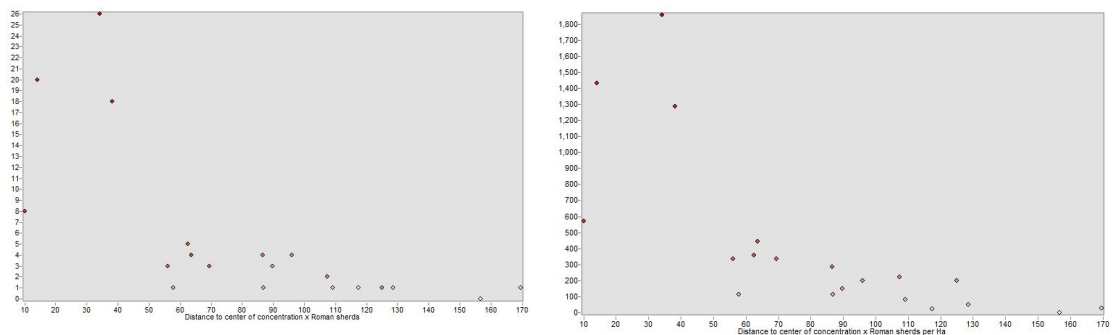
428. This same shorthand is employed in the density distribution maps made for the other areas treated in this chapter.

429. N.b. that this is true whether one considers raw or standardized measures (as plotted, respectively, on the left- and right set of axes, below):



Fig. 10: Casa Abbadessa, three-quarter view.<sup>430</sup>

of topographically-uneven areas, a variety of natural and anthropogenic processes may act to displace artifacts from their original place of deposition—and, in consequence, confound the relationship between the distribution of ceramic remains and the spatial patterning of the human activities which they suggest. The significance of such post-depositional biases<sup>431</sup> is difficult to measure, but there is some evidence for their operation in the area of Casa Abbadessa. The concentration of finds at DUs 2139–2142 is located on the southwestern face of the hillock atop which DU 2139, as we have noted, is perched. The slope of this hill is steepest in area of DU 2140, beyond which it becomes relatively more gentle, in the area of 2141, before inclining once more, in the area of 2142. As it happens, these changes in slope are inversely correlated with the observed density of sherds in the units where they occur. Catalogued finds are densest at the top of hill; least numerous in the steeply-



Minor differences aside, the relationship between distance, on the x-axis, and sherd quantity, on the y-axis, is pretty consistent. (With regard to the former: "distance" refers to the straight line distance between a point located at the weighted mean center of a polygon corresponding to the composite of DUs 2139–2142 and the centroid of each individual DU.)

430. For greater clarity, the topographical relief depicted here has been exaggerated by a factor of three.

431. On which see n. 436, below.

inclined area of DU 2140; second-densest in the relatively-flat area of 2141; and, once again, less frequent in the area of 2142. In other words, the pattern observed in DUs 2139–2142 is consistent with the downslope displacement of artifacts, very probably owing to the action of the plow. The vines planted in the field containing DUs 2139–2145 are arranged in rows running parallel to the direction of slope, and, as Ammerman has shown, plowing downslope can occasion significant lateral displacement of archaeological remains.<sup>432</sup>

If such displacement has occurred, then the modern distribution of ceramic remains at Casa Abbadessa may differ from that of the period(s) of their deposition. Given the topography of the area in question, we might reasonably posit that the ceramic evidence for human activity at Casa Abbadessa was originally concentrated atop the hill overlooking it. (Notwithstanding, of course, our impression of a "thin, but apparently pretty even" distribution of finds.) Unfortunately, this is another way of saying that MHS survey in the vicinity of Casa Abbadessa was insufficient to capture the full extent of human activity there.

#### 2.4. Chronology.

What, however, of the date of that activity? The evidence to hand is more suggestive than definitive. The relevant ceramic remains comprise a group of 93 sherds which can be dated with a greater or lesser degree of precision. Those 93 sherds, in turn, comprise 35 different chronotypes,<sup>433</sup> details regarding which appear in the apposite file. The chronology of activity they suggest for Casa Abbadessa, meanwhile, is presented in Fig. 11. The latter depicts a history of activity which, at first glance, might reasonably be described in terms similar to those earlier employed in respect of the geographical distribution of finds. This relatively gentle curve does, indeed, seem to correspond to a "thin, but nevertheless basically even" pattern over time. As with the geographical distribution, however, this impression must be problematized. In particular, two points need be made. The first regards the shape of the curve, and the second, the possibility of trends which are inadequately represented within it.

Notwithstanding our impression that, in general, the relative frequency of ceramic finds changes little over time, the fact remains that it *does* change. In specific, the curve is bimodal. A first, quite gentle peak occurs during the second–first half of the third century. After a century during which ceramic testimonia are relatively scarce, the curve peaks again, between the second half of the fourth–end of the fifth century. The evidence for sixth– and seventh century activity is less numerous, but neither can it be simply dismissed. The relevant testimonia comprise a range of sherds, the type and number of which are summarized in Table 2, Appendix 1. Among these types are a handful which are not only *characteristic* of the latest phases

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432. Ammerman 1985.

433. For an explanation of this term as used in this thesis, see Chapter 3, Section III.1.1.1.

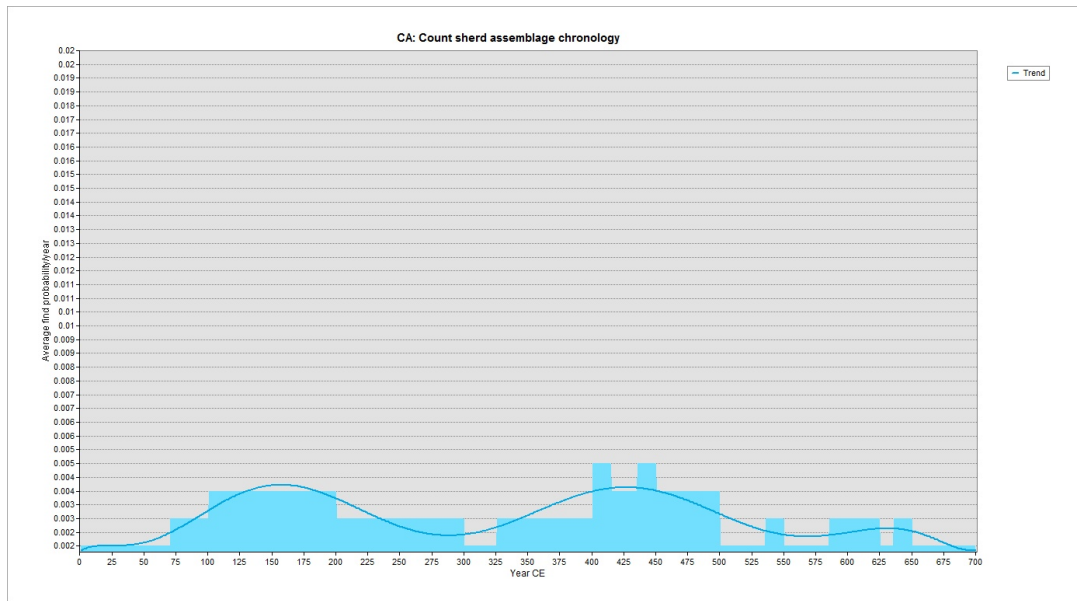


Fig. 11: Casa Abbadessa tract sherd assemblage histogram.

considered in this thesis; their chronologies can be quite specifically located within it. One is an amphora rim fragment, the characteristics of which are compatible with two African containers from the latest phase of production there.<sup>434</sup> The others are fragments of late (indeed, in all but one case, very late) African Red Slip vessels.<sup>435</sup>

434. Viz., CA3016, the characteristics of which are compatible with both Keay 62 amphorae (subtype A or D) and Keay 61 A. These containers were produced during the sixth–seventh centuries. Further details and bibliography, see Appendix 3.

435. Viz., CA3001 (form 88 B or C; mid sixth–beginning of the seventh century); CA3011 (98 or 108; sixth century); CA3014 (104; end of the fifth–mid seventh century); CA3010 (105 A; end of the sixth–first half of the seventh century); CA3000 (105 B or C; middle–end of the seventh century); and CA3013 (Base fragment in late "D" fabric; end of the fifth–end of the seventh century). Further details, see Appendix 2.

Failing the possibility of significant post-depositional displacement,<sup>436</sup> these sherds are pretty incontrovertible evidence of human presence in the area.

The same, however, cannot be said for *all* of potential sixth- or seventh-century remains. On the contrary, most<sup>437</sup> pertain to a group of ceramic types whose value as chronological indices is relatively limited. Some of the types in question were especially long-lived, as in the case of the sherds identified as Pantellerian cookware.<sup>438</sup> Others, meanwhile, refer to sherds which were too damaged to be precisely identified.<sup>439</sup> And both are types whose presence in sixth- or seventh-century contexts would be incidental, rather than diagnostic. In principle, the remains corresponding to these types might just as easily date to an earlier part of their lengthy chronologies. In practice, of course, it is unlikely that *all* of them will do so. Notwithstanding the fact that, for example, the production of Pantellerian cookware may be dated to the end of the second century BCE—and its appearance in western Sicily, not much later—it was not until the fifth century CE that it began to be traded in quantity.<sup>440</sup> Under the circumstances, the likelihood is that our twelve

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436. Which, happily, we have no reason to expect. Post-depositional biases are the result of processes acting to distort the archaeological record of the period in which we are interested. The most significant such process in the region surveyed by MHS is the continuing practice of cultivation. Even so, it is thankfully not too large a source of bias. The rural hinterland of Marsala is a predominantly agricultural zone, the vast majority of which is planted with wine grapes and (in much smaller proportion) wheat, olives, and tree crops. The people responsible for their cultivation, meanwhile, live elsewhere. These facts repercuss in various ways. The scarcity of thick vegetation means that visibility is not often a concern. The action of the plow, however, might be. Ammerman (1985), on the basis of experiments conducted in Calabria, ascertained that successive episodes of plowing varied widely in respect of their ability to displace fragments of seeded tile. When plowing occurred on flat ground, or perpendicular to a slope, displacement was minimal. Plowing down-slope, however, resulted in substantial lateral displacement. The gently hilly topography which characterizes most of the survey zone provides, in principle, for a similar effect, but in practice it was probably slight. In comparison with modern mechanized plows, most varieties of Roman plow made a much shallower cut: White 1967: 123–145, 213–216. And unlike the olive grove where Ammerman's tests were done, the vineyards in which MHS principally operates are only susceptible to plowing in one of two directions. This makes for a landscape where plow effects are greatly limited.

Alongside agricultural factors are two others which, on account of their even smaller effect on patterns of ceramic distribution, merit less involved discussion. The region's geological characteristics, as explained in Chapter 1, Section II.1, are unlikely to have had a substantial impact on the distribution of sherds from the period of this thesis. The most recent episode of significant topographical change, according to analysis performed during the summer of 2007, should be dated to approximately 10,000–8,000 y. BP. Insofar as can be determined, the area of the MHS survey universe was thereafter mostly stable.

437. Both in terms of chronotypes represented (10/17, c. 59%) and number of sherds (48/55, c. 87%).

438. Of which there were at least thirteen. (My review of unclassified project materials—see Chapter 3, Section III.1.2.2—turned up several sherds from DU 2146 which might have belonged to this ware, but which I could not conclusively identify.) Of those thirteen, one was identified as belonging to a low-walled, open vessel characterized as a "teglia", or baking pan, which was probably used to cook meal and vegetables (form M.1.1.1; Guiducci 2003: 62, Fig. 4, 65), while the remaining twelve were too fragmentary to be further characterized.

439. Several such classes exist, including, in descending order of frequency, 15 fragments of unknown amphorae; 8 fragments of ARS, fabric unknown; 4 fragments of Roman-type North African amphorae; 3 fragments of ARS D; 2 fragments of Gallic or Iberian amphorae; and 1 fragment of a Punic-type amphora. Details, see chronotype database file

440. Chronology and distribution, see Santoro Bianchi 2003. As noted therein (p. 67), Sicily—more

sherds of Pantellerian ware did, indeed, correspond to vessels from this later phase of its chronology.

In a number of other cases, however, we are justified in suspecting that some or all of the remains of a particular class are a great deal older. The fact that Dressel 23 amphorae were manufactured, by potteries in the southwest of modern Spain,<sup>441</sup> as late as the middle of the sixth century CE does not mean that amphora production in the region was generally so late. On the contrary, Dressel 23 represents the latest product of an industry whose period of greatest productivity was significantly earlier.<sup>442</sup> So, too, was that of the amphora potteries responsible for the range of containers characterized as "amphores gauloises".<sup>443</sup> In other words, it is improbable that the 2 amphora fragments identified, on the basis of their fabric, as "Gallic or Iberian" products are as late as they might theoretically be.

The same goes, furthermore, for the group of 15 fragments pertaining to amphorae which could not be more precisely identified. Here, however, the evidence is circumstantial. Notwithstanding the presence of one fragment pertaining to a late-type African amphora<sup>444</sup>—and four others which, by fabric and surface treatment, are at least *potentially* late—the corpus of identifiable amphorae includes a significant number of characteristically early types (Table 3, Appendix 1). The Gauloise containers to which we have already referred (2 sherds) are by no means the earliest. That distinction belongs to the single sherd corresponding to either a late Greco-Italic or early Dressel 1 amphora, the chronologies of which overlap during a moment which is wholly anterior to that of this thesis.<sup>445</sup> A similarly early date should probably be assigned to the non-diagnostic fragment of an amphora produced in the same fabric.<sup>446</sup> Notwithstanding the existence of late Campanian "almond-rim"

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specifically, western and central Sicily—is virtually the only place, outside of Pantelleria, where these wares have been documented in pre-second century contexts.

441. Viz., in the area of the Roman province of Hispania Baetica: Beltrán Lloris 1970; Beltrán Lloris 1978; Manacorda 1977.

442. I.e., during the early Imperial period, which saw the lion's share of Roman amphora production shift from Italy to a handful of provinces occupied with feeding the city and army of Rome. Preeminent among them were the Spanish provinces of Hispania Tarraconensis and Baetica, where a variety of shapes—most famously the Dressel 20, but also Dressel forms 2–4 (Baetican) and 7–11—were made: Southampton 2014a. For summary information and bibliography on these shapes, see *s.v.* in Southampton 2014b.

443. Basic bibliography: Laubenheimer 1985; Laubenheimer 1989. Laubenheimer defines twelve forms, all of which were distinguished, vis-à-vis the Italianate imitations previously made in Roman Gaul, by a flat base of variable size. Between the first–fourth centuries, a restricted number of Gauloise types came to be trafficked in the western and central Mediterranean. The most frequently encountered of these was the Gauloise 4, which was manufactured from the middle of the first–end of the third century (and possibly later). By c. 80, it had become the flagship Gaulish product. Also present, albeit in smaller quantities, was the Provençal Gauloise 5, which can be dated from the middle of the first century through the first decades of the second. This form is especially well-attested in Italian contexts, notably Ostia: Raynaud 1993a.

444. See n. 434.

445. See n. 419.

446. Viz., the so-called "Campanian 'Black Sand'" fabric (=CAM AM 1 fabric in Tomber & Dore 1998: 88), which has been sourced to the area around the Bay of Naples, especially near Herculaneum and Pompeii: Peacock 1977c; Williams & Peacock 2005. The fabric's name refers to the frequent inclusions of dark green augite, which to the naked eye appear as black "sand".



amphorae, the majority of the containers produced in this fabric were products of the Late Republican, rather than Late Antique, phase of Roman history.<sup>447</sup>

Given such company, we would not be remiss in wondering whether some of the unidentified sherds are early, too. In view of the uncertainty attending their classification, I am hesitant to speculate too extensively. But it is worth noting that, in respect of their fabrics, the sherds in question most closely resemble the range of early products just discussed. Put differently: there is reason to suspect, if not actually to conclude, that a phase of productive Roman activity preceded the period of greatest interest to this thesis. If so, the increase in ceramic testimonia which we have observed during the second century takes on a different complexion. Instead of an *inauguration* of Roman activity in the area, it would, rather, constitute a *resumption* of human presence there.<sup>448</sup>

At the other end of the graph, the increase in fifth-century materials is also suggestive. After several centuries of apparently-limited, or perhaps infrequent, occupation, they attest to an intensification of activity on-site. Given that the sixth- and seventh centuries are less well-represented, we cannot be certain that we are, in fact, looking at a real change in Casa Abbadessa's fortunes. Nevertheless, the possibility is one we ought to entertain. Vis-à-vis sites like Genna, PI, and SL, where the Roman materials constitute a really significant fraction of all those recovered, Casa Abbadessa reported relatively more which I would characterize, impressionistically, as "late". Among these were fragments of probable late Medieval and Early Modern productions, as noted at Borso, but also a more limited number which resembled early Medieval cooking wares I have seen elsewhere on Sicily.<sup>449</sup> A more detailed analysis of the wares in question, however, remains to be done.

## 2.5. Function and use.

The following analysis of the Casa Abadessa ceramic assemblage must of necessity be speculative. This is because, in comparison with the situation in Section 2.4, the barriers to effective quantitative analysis are higher. The degree to which it is possible to date an assemblage of pottery from survey—for which, of course, stratigraphic indicators are lacking—depends, first, on the presence of dateable sherds within it, and second, on the precision of their respective chronologies. The most useful ceramics, in this respect, overwhelmingly tend to be fine wares; lamps; and, to a lesser degree, amphorae. In contrast, ceramics belonging to the other functional classes discussed in this thesis—to wit, common- and cooking wares; dolia; and especially tile—can be difficult or even impossible to date.

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447. On the so-called "Campanian almond-rim type", which has been dated to the period between the end of the first-end of the third century, see Arthur & Williams 1992. Despite the multiplication of finds pertaining to the type, both in Italy (*Ibid.*) and abroad (Martin-Kilcher 1994), its numbers cannot compare those the Dressel 1 and 2-4 containers which, in Campanian "Black Sand" as well as other fabrics, were ubiquitous in Late Republican-Early Imperial Mediterranean trade.

448. In view of the virtual absence of characteristically first-century ceramics—which, although relatively scarce in the areas surveyed by MHS, are nevertheless consistently attested—it does not seem tenable to believe that the lacuna is simply one of documentation.

449. Specifically, at Sofiana, where I was privileged to work during the summer of 2010. Further, see Chapter 3, Section III.1 with nn. 304 and 305.

This uncertainty has important ramifications for our ability to confidently date an assemblage of sherds. Even when presented with a substantial quantity of dateable finds, there must remain some doubt as to whether the chronology of the latter is appropriate for the assemblage as a whole. Should we attempt to characterize the composition of an assemblage in *functional* rather than *chronological* terms, however, it becomes an even more serious obstacle. If we cannot establish what proportion of documented tile- and dolium fragments belong to when, we cannot assess their relative abundance within the assemblage, nor perceive how it may have changed over time.

As it happens, this is more or less the situation at Casa Abbadessa. Alongside the 107 presumably "Roman" sherds catalogued is a (presently) unknown quantity of tile. Practically none of it can be dated with certainty. It would be irresponsible, under the circumstances, to assay a quantification of their relative importance during the centuries of interest to this thesis. Nevertheless, and with all due caution regarding what are basically impressions, a few things may be said.

A first point concerns the range of functional classes documented at Casa Abbadessa. In light of the frequent similarity of remains pertaining to tiles and dolia; amphorae; and large common ware vessels—especially when they are poorly pre-



Fig. 12: Density distribution of all Roman sherds (grey); common wares (orange); amphorae (blue); and fine wares (pink).



served, as is typical on survey—it is basically impossible to avoid a measure of uncertainty regarding the relative frequency of each. The same, however, cannot be said for ceramic lamps. Owing to the peculiarities of their shape,<sup>450</sup> and scholars' relatively-more-complete knowledge thereof, most lamp fragments can be quickly identified as such. The fact that none *was* so identified is, consequently, a more-than-usually-compelling sort of argument *ex silentio*. Ceramic lamps, it would seem, were historically scarce in the area of Casa Abbadessa.

With regard to the functional classes which *are* present, some patterning may be observed. Unsurprisingly, given the degree of clustering observed in the distribution of all Roman finds,<sup>451</sup> the distribution of sherds pertaining to individual functional classes is similarly concentrated, and at more or less the same point (i.e., the area of DUs 2139–2142). But their respective degrees and directions of dispersion, insofar as they may be modeled, are somewhat different (Fig. 12). *Vis-à-vis* the distribution of all Roman sherds, the distribution of fragments pertaining to amphorae and common wares are visibly more discontinuous. Moreover, they are weighted in basically opposite directions. Per unit area, catalogued common-ware sherds are more frequent toward the eastern edge of the surveyed area. Amphorae sherds, on the other hand, are more densely concentrated toward the northwest. Neither, however, are very common toward the south of the surveyed area. In this respect, they are more like one another than either is like the distribution of fine wares, which are visibly more dispersed.<sup>452</sup>

### 3. Ditta Barbagallo.

#### 3.1. Location and characteristics.

"Ditta Barbagallo", as used by MHS, refers to an area centered on the residence of the eponymous Sig. Barbagallo. The house, which lies a little more than 0.5 km to the south of the Contrada of SS. Filippi e Giacomo, is located on the seaward side of an expansive plateau rising above the coastal plains to its west (Fig. 13).<sup>453</sup> At a distance of c. 4.5 km south of the project survey universe's northern border, Ditta Barbagallo is the southernmost of the places explored by MHS. It is also the most isolated area; the nearest of the other survey areas, Piscitello, lies some 2.5 km NNW.

Ditta Barbagallo is atypical in respect of more than its geography, however. It is the only one of the eight areas explored by MHS not to be dedicated to agriculture. With the exception of scattered grasses and thistles—which, during the summers of

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450. Or, more accurately, "shapes"; I do not mean to minimize the typological variation which characterizes the class.

451. On which see Fig. 9 and surrounding discussion.

452. Perhaps, it is worth noting, as a result of their increased susceptibility to post-depositional displacement. The relatively thinner walls typical of most fine wares make for a higher index of fragmentation for the class as a whole, and *ceteris paribus*, a greater number of lighter sherds are more easily moved.

453. The elevation of which ranges, in the area of Ditta Barbagallo, between 100–106 m asl. This is the same plateau on which Genna (section 4), Timpone Granatello (section 8), and Casa Abbadessa (section 2) are also located, albeit on its opposite, higher eastern edge.

MHS activity in the field, were mostly dry and dead—and frequent rocky outcroppings, the landscape is an unusually barren one.<sup>454</sup>

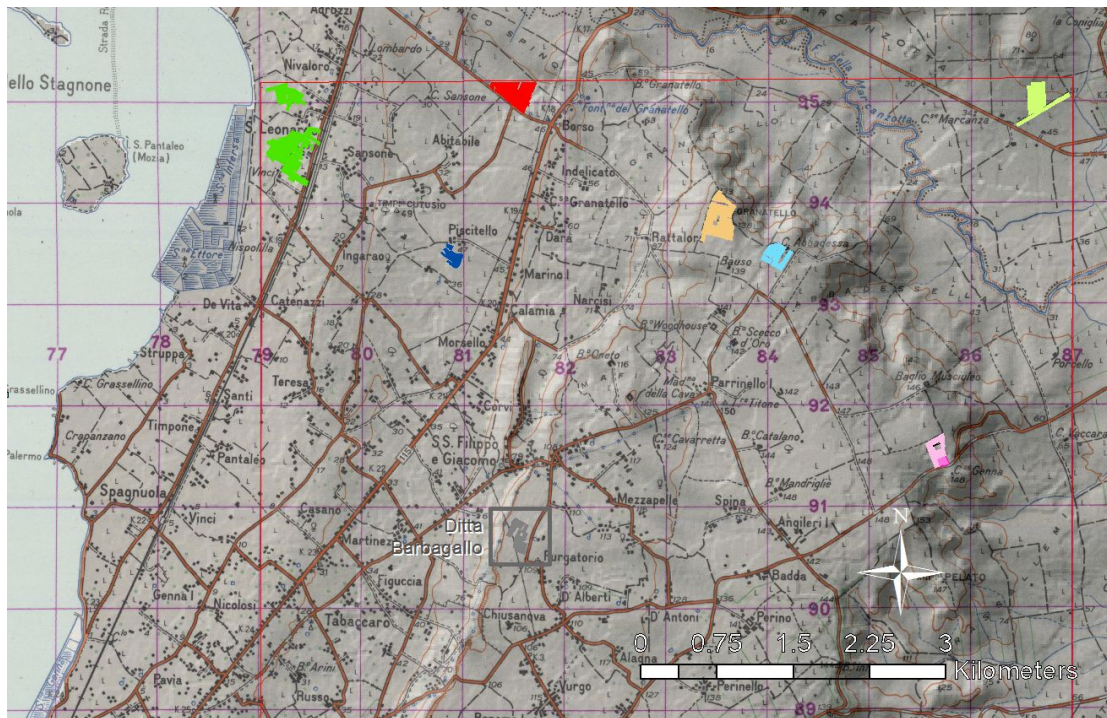


Fig. 13: Ditta Barbagallo location.

### 3.2. Survey.

Alone of the areas surveyed by MHS, Ditta Barbagallo stands out for having been designated as a target for survey by the Soprintendenza, rather than the project directors. The decision was occasioned by the eponymous Barbagallo himself, who, after having several times complained of the activity of clandestini on his land,<sup>455</sup> collected two cassettes' worth of surface artifacts for presentation to the archaeologists of the Museo Baglio Anselmi in the summer of 2009. The number and quality of these materials, which included a variety of ceramics of Archaic through Roman date,<sup>456</sup> impelled the Soprintendenza to organize a formal archaeological intervention. Responsibility for this intervention fell to MHS.

During a period three days in June, 2009, project participants subjected the area to intensive survey and surface collection (see Fig. 14). In total, c. 3.75 Ha were surveyed.<sup>457</sup> Of this, approximately 3.09 Ha were constituted as a series of nine DUs, numbered 2301–2309, surrounding the house on its northern and eastern sides.<sup>458</sup> Per

454. In local as well as regional terms. The Barbagallo property stands out even vis-à-vis its neighbors; the plots to south and east had evidently seen more recent cultivation.

455. Whom he further claimed to have driven off, on one occasion, at rifle point.

456. Especially noteworthy, among the former, was a nearly-extant Attic amphora à la brosse (on which see Johnston & Jones 1978: 121–122), dated to the sixth century BCE.

457. Or rather, designated for survey; the distinction is significant at Ditta Barbagallo, for reasons elucidated below and in n. 460.

458. DUs lying to the north, in order of numeration: 2304, 2306, and 2308. To the east, DUs 2301–2303, 2305, and 2307. DU 2309 is located to the south of the latter group, across the road connecting the

MHS collection methodology,<sup>459</sup> systematic survey and collection in these units was limited to an area corresponding to one-tenth of the total. The remaining 0.66 Ha, meanwhile, was apportioned among 18 Grid Collection Units (hereafter GCUs)



located near the edge of the plateau on the western side of the house. These 18 GCUs, which were numbered 001–018, comprised three adjacent, parallel series of six grid units each. The majority of them (GCUs 004–018) measured 20 m to a side. (Owing to their proximity to the edge of the plateau, GCUs 001–003 were constrained to half the normal width; they measure 10 m x 20 m.) Within these grid units—which were located in the area of Sig. Barbagallo's surface artifact collection—MHS project participants aspired to collect all visible artifacts.<sup>460</sup>

Fig. 14: Ditta Barbagallo survey units.

Inclusive of both DU and GCU finds, MHS fieldwalkers recovered a total of 2091 sherds in the area of Ditta Barbagallo.<sup>461</sup> Of these, only a small number (=168 sherds, less than 1% of total) were classified as pertaining to the period of interest to this thesis.

### 3.3. Quantification and intra-areal distribution.

The geographical distribution of these finds, which is given in Table 4, Appendix 1, is amenable to comment in several respects. First, it is interesting to note that the area of Barbagallo's surface collection was relatively unproductive, notwithstanding its a priori interest. Despite being subjected to a more exhaustive collection methodology, GCUs 001–018 reported a significantly lower quantity of Roman ceramics (=38 sherds, c. 23% of total) than were discovered in the 9 DUs being concurrently explored (=130 sherds, c. 77% of total). The difference is similarly marked with respect to the average density of sherds per unit area walked.<sup>462</sup> Even if we stipulate some degree of spoliation prior to MHS activity in the area, these numbers are too low to suggest that human activity was very concentrated there, at least during the period of interest to this thesis.

Barbagallo residence with the road running north into Contrada SS. Filippi e Giacomo.

459. On which see Chapter 3, Section II.

460. The area walked, in other words, was equivalent to the area of the unit as defined. As such, the total area surveyed at Ditta Barbagallo is equal to 10% of the total DU area (=0.31 Ha) plus 100% of the total GCU area (0.66 Ha), or just under 1 Ha.

461. I await the word of the directors regarding whether or not this figure also includes unit grab finds.

462. Average sherd density, DUs 2301–2309: 3453 sherds/Ha. GCUs 001–018: 1552 sherds/Ha.



This is not to say, however, that no such place of concentration exists (Fig. 15). The units which lie on the eastern (DUs 2301–2303, 2305), and to a lesser extent the north- and southeastern (2304 and 2309, respectively), sides of the Barbagallo residence reported more substantial quantities of sherds than were documented to its west. (In one case, *much* more substantial; but DU 2303 is a special case.<sup>463</sup>) In total, the sherds found in DUs 2301–2305 and 2309 account for almost three-quarters (=124 sherds; c. 74% of total) of those catalogued at Ditta Barbagallo. Their cumulative surveyed area, in contrast, represents less than a quarter of the total.<sup>464</sup> Considering sherd density measures, rather than raw counts, points up this clustering, since it deemphasizes the significance of precisely that unit (DU 2309) which is most distant from the others.

### 3.4. Chronology.

What of the chronological distribution of the finds from Ditta Barbagallo? The evidence here is a little less extensive. Of the 168 broadly Roman sherds documented in the area, 48 cannot be any more specifically dated. The remaining 117, however, provide us with more or less specific information. In all, they constitute 21 distinct chronotypes,<sup>465</sup> details concerning which appear in the Ditta Barbagallo chronotype database file. In aggregate, they suggest (see Fig. 16) that human presence at Ditta Barbagallo was most significant during the years between the second half of the first—end of the fifth century.

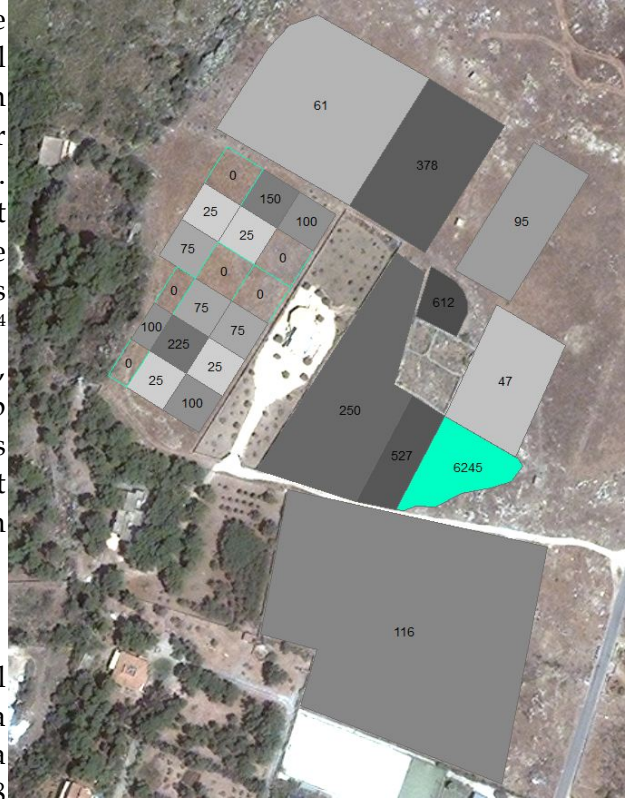


Fig. 15: Density distribution, Roman sherds.

463. Owing to the need to rapidly assemble a presentation of findings at Ditta Barbagallo for the Museum directorship, the materials from this unit were given directly to me to study. Needless to say, the lack of a preliminary sorting phase resulted in a great many more sherds being catalogued than was typical anywhere else—a fact which is lamentable, for methodological reasons, but unavoidable under the circumstances.

464. Total area walked: 0.22 Ha, or approximately 23% of total (for which see n. 460). The total surface area of these units, it is worth noting, represents a greater proportion of the total analogous figure: 2.17 Ha, or approximately 58% of total.

465. In fact there are 120 dateable sherds, which comprise 23, rather than 21, chronotypes; but two of these types—corresponding to a Dressel 1 A amphora (1 sherd) and either a late Greco-Italic or Dressel 1 A amphora (2 sherds), respectively—entirely predate the period under consideration; see n. 419. As such, the types in question do not figure in the calculations made here.

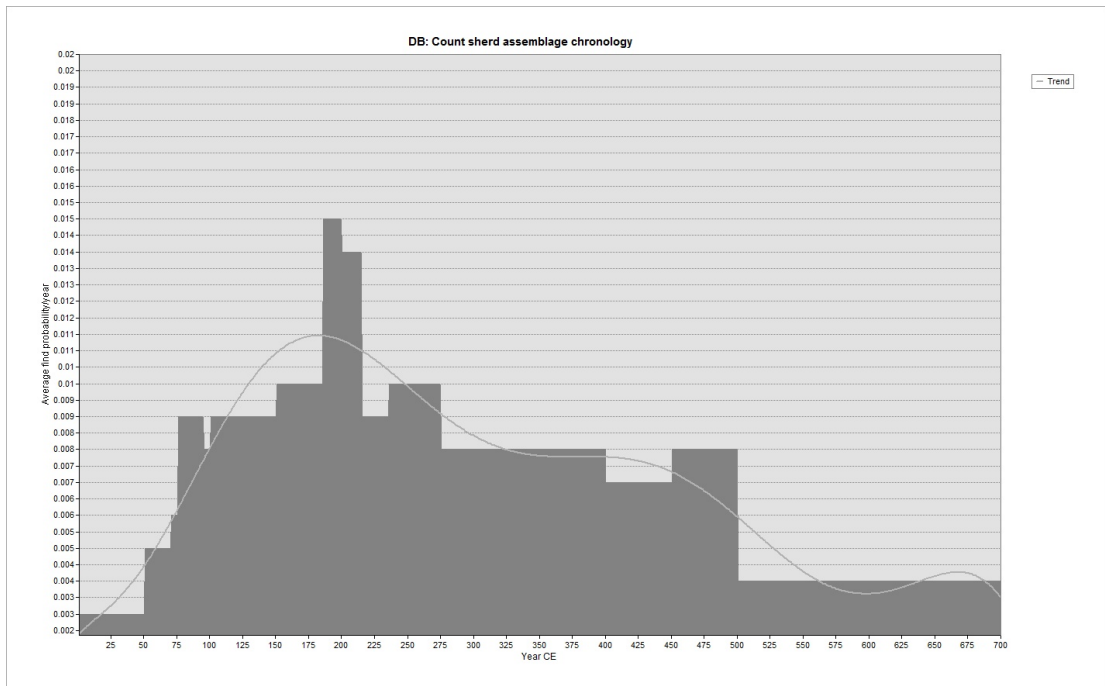


Fig. 16: Ditta Barbagallo tract sherd assemblage histochronology.

That said, the number and significance of ceramic testimonia related to this period varies substantially over time. As depicted in Fig. 16, the relevant portion of the curve is separable into two parts. The first of these, which begins c. 75 and ends some two hundred years later, is distinguished by a notable (albeit far from static; see below) frequency of contemporary ceramic remains. During the subsequent 225 years, meanwhile, such evidence is comparatively rarer, if also comparatively more consistent.<sup>466</sup> Human presence at Ditta Barbagallo, in other words, seems to have been relatively more significant during the first—third centuries than it would subsequently become.

As we have already noted, however, the quantity of evidence for this earlier, and apparently busier, period is itself variable over time. Per Fig. 16, there is a noticeable uptick in testimonia between 150–275, and an isolated spike during the last quarter of the second century. The latter is associated with the presence of three sherds pertaining to at least two ARS vessels of, probably, Hayes type 14 A or 16,<sup>467</sup>

466. Save for during the first half of the fifth century, during which the curve dips slightly below the level maintained before and, briefly, after this minor trough. This dip—or, rather, the short-lived rise which follows—is almost certainly an artifact of my methodology, however. Among the chronotypes attested at Ditta Barbagallo is one sherd belonging to a Keay 57 amphora (see Appendix 2, *s.v.* DB3000), which can be dated to the second half of the fifth century: Bonifay 2004: 135–137. Its relatively tight chronology, when compared to the much wider intervals assigned to most of the other chronotypes recorded at Ditta Barbagallo (only the three sherds identified as ARS form 14 or 18 can be more closely dated), has a commensurately more pronounced effect on the shape of the curve. For a discussion of these sorts of biases, see III.2.1.3.

467. Or, more broadly, early entrants in the continuum of forms (in chronological order, 14 A; 16; 18; 14 B; 15; 14 C; 17; 31) produced in late "A" fabric: Bonifay 2004: 157–159. The fragments in question are those inventoried as DB3004, DB3005, and DB3020 (the latter two of which figure in the Fineware Catalogue: Appendix 2). The first two—which comprise, respectively, a rim- and base fragment—were found in DU 2303, tract 1. DB3020—which, like DB3004, is a rim sherd—was recovered in 2302, tract 2.

the chronology of which spans some thirty years between the end of the second–beginning of the third century.

As should be obvious, given the prominence of the associated peak, it is difficult to overstate the value of specifically-dateable sherds in fixing the chronology of human presence in a region. Unfortunately, however, such sherds are distinctly in the minority at Ditta Barbagallo. The evidence for the (relatively-well-attested) late first–late third century peak is illustrative. Of the 21 chronotypes detailed above, 18 can be either wholly or partially situated within the period under discussion. Of these 18, however, only seven are characteristically early (Table 6, Appendix 1, italicized types).<sup>468</sup> The remaining 11 types are characterized by chronologies which extend into the second phase identified in this section. This is not to say that the evidence is misleading, precisely; there are too many, and too many different, late first–late third century sherds to discount the significance of this phase. But it is possible that the real intensity of human activity—and the prominence of the corresponding rise in Fig. 16—was less pronounced than the prominence of the associated peak might suggest.<sup>469</sup>

A number of similar remarks apply to the period between c. 275–500. As indicated by the diminished salience of the corresponding part of the curve, the evidence for this second phase is less extensive than that for the first. The 15 associated chronotypes are 3 fewer than the 18 which relate to the late first–late third centuries, and the number of sherds they comprise is correspondingly fewer.<sup>470</sup> Furthermore, an even *smaller* number of these chronotypes can be characterized as being exclusively late. Only three types—corresponding, in specific, to the African Keay 57 amphora (1 sherd); the eastern Mediterranean Late Roman Amphora 2 (1 sherd); and non-diagnostic fragments of ARS fabric D (2 sherds)<sup>471</sup>—entirely post-date the c. 75–275 peak (Table 6, Appendix 1, types in bold). The remaining twelve are types which, at least in principle, might be related to an earlier period of activity at Ditta Barbagallo.<sup>472</sup> Despite this fact, I do not believe that the evidence for fourth–fifth century human activity is entirely chimerical. Failing proof of considerable post-depositional displacement,<sup>473</sup> the presence of a handful of closely-dated finds in the

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It is possible that DB3004 and DB3005 may pertain to a single vessel. If so, DB3020 must perforce belong to another pot. Notwithstanding the similarities of fabric and slip, the profile of the rim is distinct.

468. N.b. that 4 of these 7 "early" types—"Frag., Roman Gallic amphora"; "TSI floor frag.: rouletting between grooves"; ; "LR-EI thin-walled table wares, origin unknown"; and "LR-EI thin-walled table wares, local"—are potentially *earlier* than the span under discussion here. On the ramifications of this fact for the area's (ceramic) chronology, see discussion of an phenomenon at Casa Abbadesa: p. 99.

469. Particularly given that this group of 11 includes the 2 best-represented classes by sherd count ("Unknown Roman amphora" and "African cookware fragment"; 39 and 27 sherds, respectively).

470. Viz., 100 sherds potentially from the later interval as against 113 from the earlier. The 15 chronotypes associated with 275–500 (of which three are characteristically late; see bolded items in Table 5, Appendix 1), as well as the 18 associated with the late first–late third centuries (7 of them characteristically early; italicized items in Table 5, Appendix 1), are listed in Table 6, Appendix 1.

471. Keay 57: see n. 466. LRA 2: Riley 1979: 217–219. ARS D: the bibliography is extensive. Bonifay 2004: 48–50 provides a succinct description of the subtypes which are currently recognized, as well as details concerning their manufacture.

472. See however n. 474.

473. Which, to all appearances, is lacking at Ditta Barbagallo. As indicated in Section 3.1, the area is not under cultivation, and as a result, has largely avoided the effects of modern plowing. Moreover, it is

surveyed area cannot simply be dismissed. And as we have already observed with respect to Casa Abbadessa, some of the types which, in principle, are potentially early, are in practice probably late.<sup>474</sup>

All that said, the fact of such significant overlap in ceramic types pertaining to our first and second sub-periods is itself important. Despite some uncertainty regarding the relative significance of the phases we have distinguished, the evidence is actually most persuasive regarding the continuity *between* them. As such, it serves to define a period of relatively significant activity in the vicinity of Ditta Barbagallo. In contrast to the situation at e.g. Casa Abbadessa, the evidence for later presence is extremely limited. None of the types documented by MHS can be conclusively said to post-date the fifth century, although some of them—including, notably, two which were earlier proffered as characteristically late<sup>475</sup>—are known in sixth- and seventh century contexts. Nevertheless, they are probably residual.

### 3.5. Function and use.

For reasons which I have already explained,<sup>476</sup> our analysis of the functional composition of Ditta Barbagallo's ceramics must remain a basically impressionistic one. Nevertheless, several of these impressions are worth noting, the first of which concerns a lack which we have already noted in respect of the ceramic inventory at Casa Abbadessa. As there, the absence of any fragments identified as pertaining to a ceramic lamp is noteworthy, and for much the same reasons. The chronology suggested by the dateable amphora, common-, and fine ware sherds is one during which a wide variety of imported, and to a lesser degree local, lamps are attested in Sicilian contexts.<sup>477</sup> It is possible, of course, that the range of human activities at Ditta Barbagallo excluded those in which ceramic lamps might have been used. In that case, however, we should expect to see fewer of the table wares which often occur alongside them.<sup>478</sup> The latter, however, are present in some quantity.<sup>479</sup>

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basically devoid of the sort of significant relief which is most conducive to the lateral displacement of plow-zone materials, whether owing to anthropogenic or natural erosive processes. Finally, the distribution of ceramics documented by MHS—which, as noted in Section 3.3, are thickest on the eastern, upslope, side of the surveyed area—is *itself* an argument against the historical significance of post-depositional displacement.

474. Among them African and Pantellerian cooking wares. On the latter, see n. 440. African cooking wares began production not much later, in the first century. At this early stage, however, their traffic and use was overwhelmingly a local affair. It was not until the following century that the African line of products was exported in quantity: Raynaud 1993b: 87.

475. I.e., "LRA 2" and "ARS D fabric". Production of both types began in the second quarter of the fourth century. The former, in its diversity of subtypes, lasted until middle of the seventh century, and the latter, some fifty years after that. References, see n. 471.

476. Discussion, see Section 2.5.

477. The evidence is summarized by Bonacasa Carra & Vitale 1997-1998: 383-385, 414-423.

478. Most obviously, and probably most typically, in stable domestic contexts. Needless to say, both table wares and lamps have occurred in a variety of *non*-domestic contexts, too; both classes of pottery are well attested, for example, in tombs and other mortuary spaces. But the association between them is frequent in such cases as well.

479. In total, 25 sherds, of which 19 pertain to ARS vessels, 3 are thin-walled ware (both local and imported), 1 is TSI, and 2 are unknown. (One of these last may, perhaps, be an example of Eastern Sigillata A; the other was too fragmentary to support speculation.)

The second point concerns a type of pot which, in contrast, is conspicuous by its *presence*. This is the class of large, typically hand-built storage vessels which are known as either *πίθοι* or *dolia*, depending on the context.<sup>480</sup> The number of sherds belonging to this sort of vessel is admittedly small; indeed, only five were catalogued.<sup>481</sup> Nevertheless, it is noteworthy, since *no* such sherds were definitively identified at any of the other areas surveyed by MHS. Their geographical distribution is interesting, despite the quantities involved. As noted in Section 3.3, the distribution of all sherds catalogued as pertaining to our period is strongly concentrated in several adjacent units (2301–2303, 2305) located in the middle latitudes of the eastern part of Ditta Barbagallo. Our 5 *dolium* fragments, meanwhile, were found in units in the northern–, and to a lesser extent western, parts of the surveyed area.<sup>482</sup> One possible explanation for this discrepancy is that the pots in question are not actually Roman. Notwithstanding the fact of their inclusion in the subset of materials which were deemed, during preliminary sorting, to belong to the period with which this thesis is concerned, the sherds in question are too fragmentary to provide more specific typological information. Analogous vessels were produced by Sicily's earlier inhabitants, too, and we cannot be certain that the fragments under discussion do not actually pertain to an earlier phase of the area's habitation.<sup>483</sup>

If, however, they *are* contemporaneous with the ceramics at issue here, the difference in patterning is noteworthy. With regard to the other classes of pottery documented at Ditta Barbagallo, so significant a discrepancy does not exist. Grosso modo, the distribution of amphora, common–, and fine ware sherds (Fig. 17) echoes that of the corpus as a whole. This is not to say that no differences exist. The distribution of catalogued amphora sherds, which is virtually coterminous with that of all Roman sherds, is the most similar of the three.<sup>484</sup> The distribution of catalogued common– and fine wares, meanwhile, is relatively more concentrated. Excepting a handful of fragments from the Grid Collection area,<sup>485</sup> the former are most frequent in the units located in the southeast of the surveyed area. An even greater degree

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480. On these terms, see Chapter 3, n. 40. My decision to cite both names here—rather than merely *dolium*/–a, which I believe to be the more appropriate term for the period under discussion—is deliberate, for reasons explained below.

481. During a final review of the project materials in Fall, 2012, I noted a limited number of additional *dolium* sherds. Time pressures, however, rendered it impossible to conclusively determine their quantity. For the findspots of these fragments, see n. 482.

482. Viz., DUs 2304 (2 sherds); 2306 (1 sherd); and GCU 014 (1 sherd). The additional, unquantified sherds mentioned in n. 481 were noted in DUs 2306, 2307, and 2308, which is consistent with this pattern.

483. And, as such, constitute *πίθοι*, as proposed above.

484. This is true whether one employs raw– or area–adjusted sherd counts as a metric (in the latter case, the finds from DU 2309 are deemphasized, but the pattern is otherwise the same). In general, this is true of the common– and fine ware distributions, too.

485. Comprising 3 sherds of African cookware (1, from GCU 008, pertaining to a casserole; another, from GCU 015, to a lid; and a third, from GCU 011, to an unidentifiable fragment of the "classic" phase of this production: see cumulative chronotype database file) as well as 1 sherd of what is likely a locally-made common ware mortar (GCU 012). (A handful of other fragments possibly pertaining to a mortar were also noted in GCU 005, but not included in the catalogue for purposes of quantification).



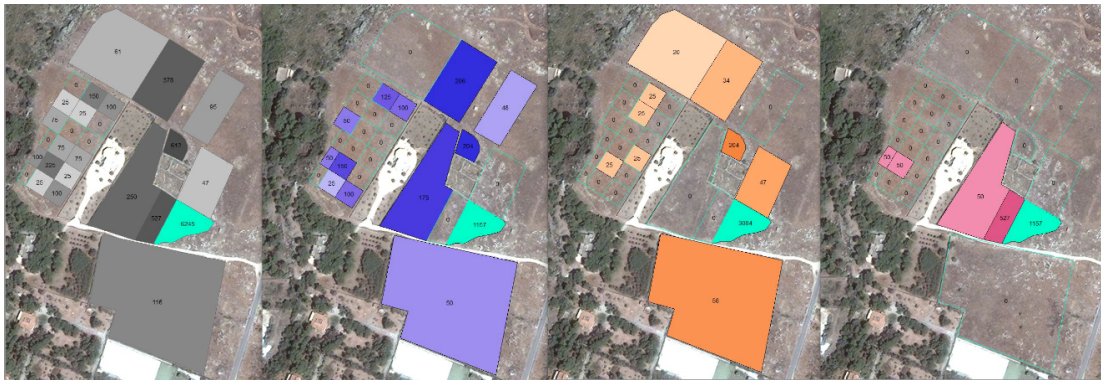


Fig. 17: Density distribution of all Roman sherds (grey); common wares (orange); amphorae (blue); and fine wares (pink). DU 2303 is in light blue.

of clustering is visible in the distribution of the fine wares, virtually all of which were found in the area comprising three units (2301–2303) located at the heart of the overall distribution.

As always, given the difficulties inherent in a selection of pots from survey, one must be cautious in extrapolating from these patterns to historical trends in human behavior. At minimum, however, two things seem clear. Insofar as amphora-, common-, and fineware sherds are a proxy for human behavior, activity in the area of Ditta Barbagallo seems to have been pretty localized. But to the degree that these classes are a proxy for *different* behaviors, the latter do not seem to have been entirely coincident. Some articulation of finds, and so presumably of activity, may be observed.

#### 4.Genna.

##### 4.1. Location and characteristics.

Far and away the most productive area surveyed by MHS was that of Genna.<sup>486</sup> In project parlance, the toponym refers to an expanse of agricultural fields located in contrada Rassalleme (Fig. 18). More specifically, Genna is located on "a well-watered plateau overlooking a fertile plain"<sup>487</sup> to the northeast of Angileri, which, at c. 1.7 km distance, is the nearest settlement of any density. The site lies closer to the eastern border of the project survey universe—and as such, further inland—than all but one of the other areas explored by MHS.<sup>488</sup> In part because of this fact, and in part because of its position as the second most southerly place of project activity, Genna is distinguished by a relatively high degree of isolation.<sup>489</sup>

486. The name makes reference to the nearest toponym, "C.<sup>se</sup> Genna", appearing on the *Cdl*.

487. Blake & Schon 2010: 60. The difference in elevation between the plateau (c. 140 m asl) and the plain (c. 120 m asl) to its east is some 20 m.

488. Viz., Marcanzotta, the easternmost extent of which abuts the survey universe border. Genna, meanwhile, lies some 1.26 km to the west thereof.

489. The average distance between Genna and the seven other MHS survey areas, c. 4.5 km, is the third highest such measure. Only Marcanzotta (c. 5 km) and San Leonardo (c. 4.6 km) have higher such features.

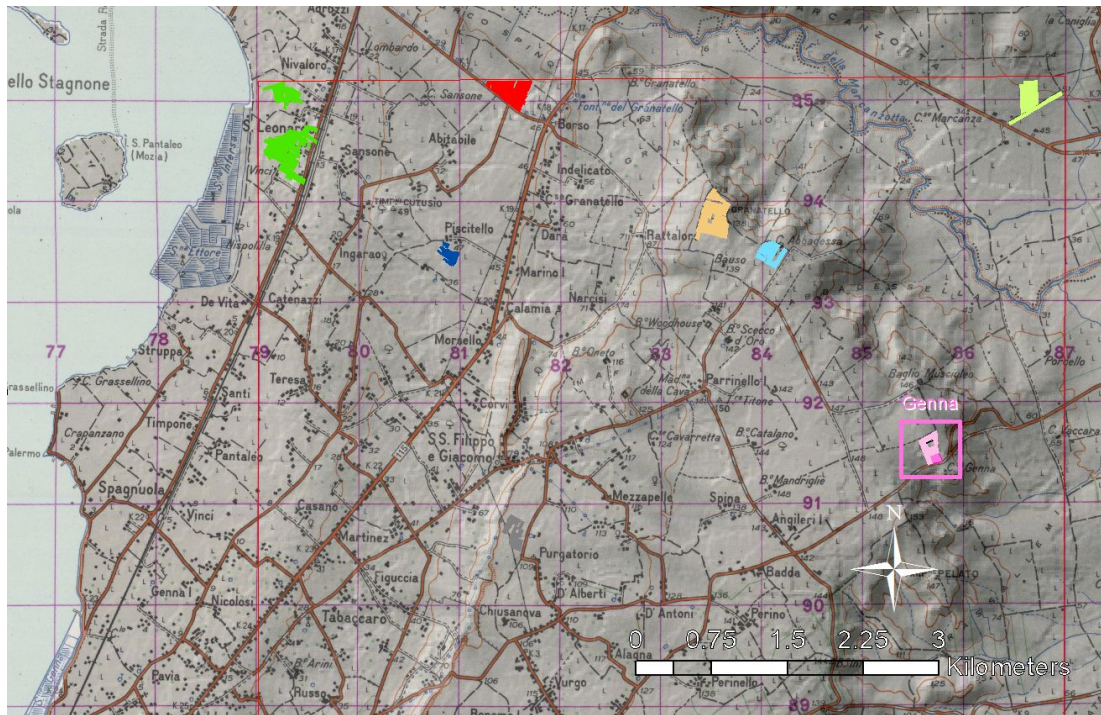


Fig. 18: Genna location.

As it happens, this is true not only in respect of the other areas surveyed by MHS. It also holds for modern habitation, grosso modo. Angileri is typical of the limited settlement in the vicinity, both in respect of its location (to the west of Genna) and its scale (uniformly modest).<sup>490</sup> The evidence of *earlier* settlement, in contrast, is copious. The region in which Genna is located is dotted with *bagli*, the most proximate of which lies a mere 0.5 km to the north. Baglio Musciuleo was constructed in the nineteenth century by the English winemaker Benjamin Ingham to take advantage of precisely the qualities which distinguish the area today. Like the majority of the places explored by MHS, Genna's surface area is almost entirely given over to cultivation, specifically of grapes for wine. Apart from supports for vines, modern construction is almost entirely absent. The sole significant exception consists in one large and one small cistern which are located, respectively, in the center and to the north of the surveyed area.

490. Other local settlements—including Madonna della Cava, a contrada of the frazione of Bosco, and Parrinello, itself a frazione of the comune di Marsala—are similar in size and plan.



#### 4.2. Survey.

Alone of the areas surveyed in 2008, Genna does not form a part of the "stratified sample" of sites located along the northern border of the project survey universe.<sup>491</sup> Its designation as a target for survey was determined by a simpler criterion: the sheer volume of surface remains. Project participants noted the latter during the course of "extensive reconnaissance to the south of the northern transect".<sup>492</sup> In all, MHS designated some 3.5 Ha of farmland (Fig. 19) for intensive survey. Approximately 77% (c. 2.70 Ha) of this area was subdivided into standard MHS Discovery Units, of which 17, numbered 1050–1066, were defined.<sup>493</sup> In the zone of



Fig. 19: Genna survey units.

greatest artifact density, meanwhile, the project directors chose to reserve an area for more intensive Grid Collection.<sup>494</sup> This expanse, which was located on a local prominence in the south-eastern part of the surveyed area—not to mention at the southeastern edge of the plateau on which the site is found—measured some 7000 m<sup>2</sup>.<sup>495</sup> The area from which artifacts were actually recovered, however, was far smaller. Only 100 m<sup>2</sup> were gridded for GCU collection methodology, and of those, only 32 m<sup>2</sup> (corresponding to a selection of 32 GCUs<sup>496</sup>) were ultimately surveyed. Nevertheless, the finds documented in these 32

491. Concerning this "stratified sample", see discussion in Section 1.2.

492. Blake & Schon 2010: 60. As the authors go on to note, the site, while never previously explored, was known local scholars for some time previous. Di Stefano (1982: 358–359) notes the presence of "un'area molto estesa (circa 5 ha.), caratterizzata dalla presenza di resti di strutture murarie e di una notevole quantità di frammenti di ceramica...[che] coprono un arco cronologico molto vasto, dall' età ellenistica a quella medievale".

493. The area is divided into two fields, the border between which is defined by a tractor path running E–W along the southern edge of a large cistern. DUs 1050–1059, which are all of equal size, are located in the larger southern field surrounding the Grid Collection Area located at the southeast corner of the plateau. DUs 1060–1066, meanwhile, are arranged around the cistern which occupies the center of the northern field.

494. On the significance of this term to MHS survey methodology, see Chapter 3, Section II.

495. The local maximum altitude, 142 m asl, is located in the southeastern corner of the plateau, which rises some 12 m above the area to its north and west (average local elevation, 130 m asl).

496. The names of which consist in two integers separated by a comma, after the fashion of coordinate pairs: e.g., GCU 6, -4. These integers correspond to specific rows and columns in the 10 x 10 m grid which was sampled. As I do not presently have the key, however, I cannot yet illustrate their location

units were prodigious. As Blake and Schon note, the most productive GCU reported more than 1,000 objects.<sup>497</sup>

Unsurprisingly, given such a density of finds, the total number of sherds collected at Genna was notably high. In total, 569 were catalogued as pertaining to the period considered by this thesis.<sup>498</sup> They are considered below.

#### 4.3. Quantification and intra-areal distribution.

On the basis of the evidence to hand, it is not too great an oversimplification



to say that the broadly "Roman"-era sherds are distributed in more or less the same fashion as the corpus of all ceramics documented on site (see Table 7, Appendix 1). Of the 569 sherds referred to above, nearly half (=252 sherds, c. 44% of total) were recovered from the area of the Grid Collection Units. Moreover, these figures probably underrepresent the concentration of finds in this area. This is because they do not include the prodigious—and, as discussed further on, often typologically distinctive—grab finds which were recovered in a number of GCUs.<sup>499</sup> Notwithstanding the doubts I have expressed<sup>500</sup> concerning the analytical value of attempting to distinguish "sites" from a landscape of continuous human activity, the

Fig. 20: Density distribution, Roman sherds. fact of such a discrete and more-or-less delimitable concentration of materials is arresting. Insofar as ceramic remains

within this grid.

497. 2010: 61. The authors do not indicate which GCU this was, however, and absent the figures for pottery pertaining to other phases of the site's occupation, I cannot presently guess. In *Roman* ceramic terms, the most productive unit was GCU 4, -7, which reported 68 sherds worthy of being catalogued.

498. A figure, it must be noted, which is further from being exhaustive than in the other areas surveyed by MHS. This is largely a function of the preponderance of sherds, a careful accounting of which would have required more than the time available to me for analysis.

499. On the identification and significance of these finds, see Section 4.4. The GCUs whence grab finds were recovered number 7 and include GCUs -5, 1; 1, -3; 3, -8; 3, -6; 3, -4; 3, -2; and 6, -9. The first two of the units also reported a number of tract finds.

500. Discussion, Chapter 3, Section III.1.2.3.

are a reliable index of certain kinds of human activity,<sup>501</sup> the evidence suggests that such activity was spatially very concentrated.

The GCA, however, is not merely the place where finds were most numerous. As evidenced by the distribution of sherds in DUs 1050–1066, it is also the geographical center of the distribution. This is especially clear when we consider sherd density measures. As depicted in Fig. 20, the calculated density of finds per hectare is greatest in the DUs (1050–1055) which encircle the GCA on its northern and western sides, and lower in those more distant (among them 1060–1066).

Not every aspect of the observed distribution of sherds, however, can be explained simply in function of their distance from the center. The concentration of finds in the DUs which lie immediately to the north, and especially to the northeast, of the GCA—and which lie, interestingly, closest to the edge of the plateau on which Genna is located—is more pronounced than in those which border it to the west. And the DUs which are located at the latitude of the large modern cistern (1060, 1064, and 1066) produced even fewer sherds than those which lie to their north (1061–1063).<sup>502</sup> I am reticent to make too much of these observations, since the corpus of sherds to which they refer is more than usually incomplete. Nevertheless, they should not be dismissed out of hand, even if an explanation cannot be easily proffered.

#### 4.4. Chronology.

More or less specific chronologies can be assigned to a substantial number of the sherds which were catalogued as pertaining to the period of this thesis. Indeed, nearly 80% (=453 sherds) can be assigned a chronotype, of which some 145 were attested. Details concerning these chronotypes appear in Genna's chronotype database file. As weighted by sherd count, they suggest a chronology of activity which is depicted in Fig. 21. The curve it describes is noteworthy in several respects.

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501. Which is not to say that the converse—i.e., that a lack of such durable remains attests to a corresponding lack of activity—is also true; see Chapter 3, n. 68.

502. If we consider only the catalogued finds, in fact, they do not seem to have produced any—an impression which is doubtless exaggerated, but not, I think, entirely misleading. My review of the project cassettes pertaining to DUs 1060, 1064 and 1066 also turned up virtually nothing in the way of plausibly Roman sherds.

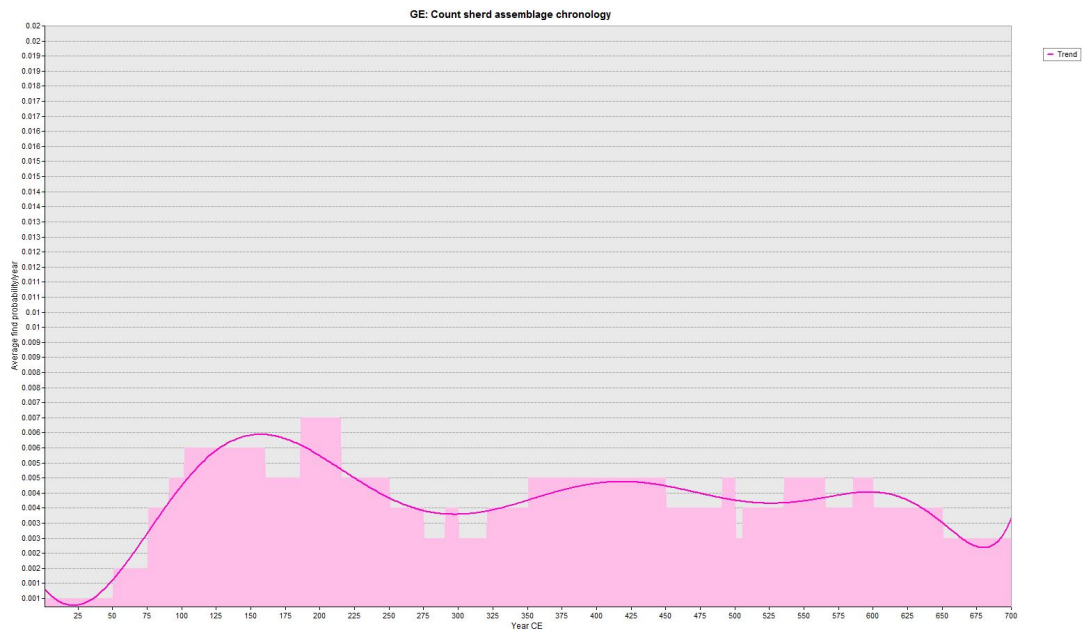


Fig. 21: Genna tract sherd assemblage histochronology.

Most obviously, it suggests that the site was occupied almost continuously. The tract finds attest to human activity in the region during the entirety of the period depicted. What is more, virtually every *part* of that period is well-attested. It is possible to individuate at least one local peak—coinciding, specifically, with the late second–early third centuries—but even at its highest, the curve does not rise too far, relatively speaking. These findings bear out the preliminary conclusions advanced by Blake and Schon concerning the significance of Roman period habitation, *grosso modo*.<sup>503</sup>

As indicated by the relatively more numerous testimonia for the late second–early third century, however, the picture is not a wholly static one. Indeed, there are several points at which the evidence suggests some degree of change in the nature or intensity of human activity at Genna. One of these is to be found at the left-most side of the curve. Tract ceramics pertaining to the first half–, and in lesser measure the first three-quarters, of the first century are fewer than those which appear immediately thereafter. The discrepancy is, perhaps, not so great as the tract sherds alone would suggest, since a subset of the grab finds may be dated to the self-same period.<sup>504</sup> Nevertheless, it appears to be real. The change is not so abrupt as at Piscitello, where, I believe, the evidence is compatible with some sort of "foundation" event, but it suffices to suggest that the second century witnessed a significant ramping-up of activity.

503. Blake & Schon 2010: 60–61.

504. 20 grab sherds pertain to chronotypes which overlap with all or some of this period. None, however, can be *wholly* dated to the interval in question. The closest are 2 fragments of TSI (50 BCE–150 CE) and 5 fragments of thin-walled ware (125 BCE–200 CE). Many of the others cannot be nearly so closely dated, and intersect with the period in question primarily by virtue of the *length* of their chronologies. Thus e.g. 2 sherds pertaining to unknown amphorae; 2 sherds of Pantellerian ware; and 5 fragments of ARS, fabric uncertain.



A further two intervals are characterized by relatively fewer testimonia, notwithstanding that the difference is less pronounced. The first of these coincides, more or less, with the period between the second half of the third–first half of the fourth century, while the second appears to begin sometime during the first half of the seventh century and continues through the end of the period depicted in Fig. 21. The third–fourth century trough is a matter to which I return in Section III.2.1.3. The significance of the seventh-century decline is a little bit harder to parse. At issue is the fact of its coincidence with the cessation of Pantellerian cooking ware production, examples of which are numerous enough (15 sherds) that their sudden disappearance may have had an exaggerated effect on the curve. If so, the apparent rarification of activity on site may be largely chimerical. On the other hand, a preliminary study of the Medieval and post-Medieval finds shows a contraction of the occupied area;<sup>505</sup> perhaps the seventh century witnessed the beginning of this process.

#### 4.5. Function and use.

Given the degree of concentration which characterizes the corpus of all catalogued Roman-era finds from Genna, it should come as no surprise that the distribution of sherds identified with particular functional classes is similarly concentrated. If anything, the centrality of the GCA is actually *more* pronounced, in several instances significantly so. Such, for example, is the case with respect to the Roman period cooking- and fine table ware. As shown in Fig. 22, these types are all but absent beyond the GCA and its immediate environs.<sup>506</sup>

The significance of these findings, in respect of their ramifications for patterns of human activity on site, are relatively straightforward. Provided we accept the aforementioned functional classes as evid-



Fig. 22: Cooking (red) and fine ware (blue) density.

505. Blake & Schon 2010: 61–62.

506. With the sole exception of 1 fragment of Pantellerian ware recovered from DU 1061.

ence for a suite of related activities, these activities, it would seem, were similarly concentrated in space. A finer-grained analysis of patterns *within* the GCA might reveal the existence of dedicated areas of activity, and should be considered a desideratum, going forward. In the meantime, suffice it to note that the impression we have—viz., of a site characterized by dense, multifarious activity—is entirely consistent with Blake and Schon's identification of Genna as a villa.

## 5. Marcanzotta.

### 5.1. Location and characteristics.

The area identified as "Marcanzotta"<sup>507</sup> comprises a group of agricultural fields in the area of Marcanza Grande (Fig. 23). This is a region of gentle topography and, in general, low relief, through which flows the Fiume della Marcanzotta.<sup>508</sup> The river lies a mere 1.5 km to the south of the area surveyed by MHS, which is located in the northeastern corner of the MHS survey universe. As such, Marcanzotta constitutes the easternmost of the three sites comprising the "stratified sample" explored in 2008.<sup>509</sup> It lies some 7.5 km to the east of San Leonardo and a little more than 5 km from the nearer site of Borso. The closest of the areas surveyed by MHS, however, is Casa Abbadessa, which is located some 3 km to the southwest. Marcanzotta is equally isolated with respect to modern patterns of settlement. Excepting a handful of scattered farmhouses like the one which, at less than half a

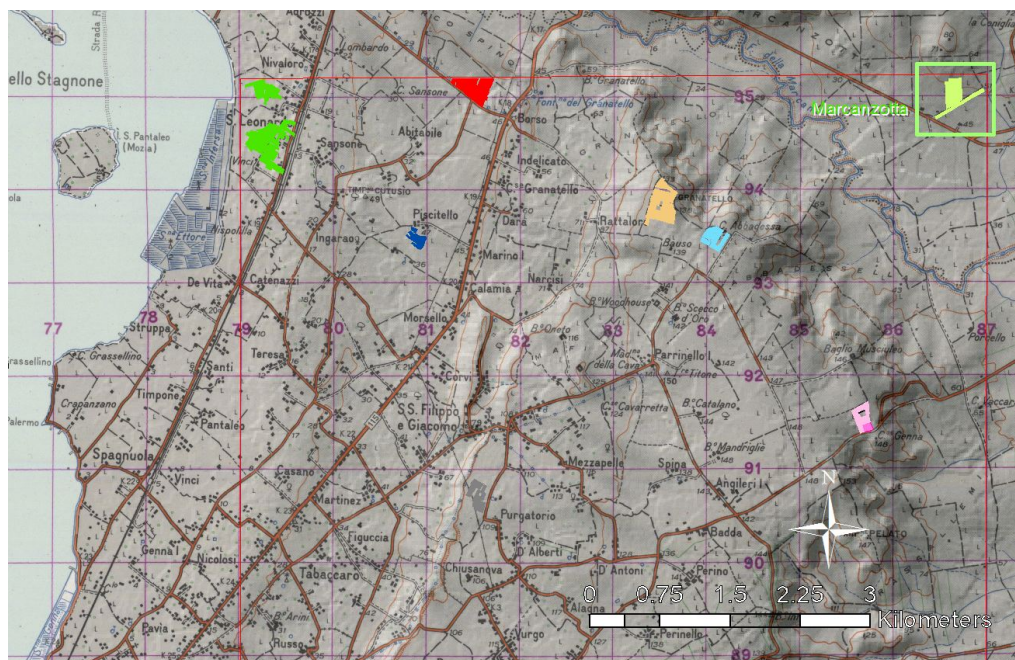


Fig. 23: Marcanzotta location.

507. In apparent reference to the nearest toponym appearing on the *CdI*, which is Marcanzotta. The identification is erroneous, however. The area of Marcanzotta, as is clear from the *CTR*, actually lies some 2.5 km NW along SP35.

508. In the immediate vicinity of the area surveyed by MHS, the elevation varies between 34–66 m asl. Attested slopes are in the range of 0°–9°, but are on average pretty flat; the mean slope is a mere 1.79°.

509. On which see Section 1.2.



kilometer to the south, constitutes the nearest point of human habitation, the region is practically unoccupied.<sup>510</sup>

As in most of the areas explored by MHS, the land is uniformly given over to cultivation. All of the fields surveyed by project participants, as indeed virtually all the fields in the vicinity, are planted with wine grapes.<sup>511</sup>

## 5.2. Survey.

MHS activity in the area of Marcanzotta was limited to two days (July 21–22) during the 2008 field season. During that time, project participants surveyed some 7.5 Ha.<sup>512</sup> This expanse comprised 28 Discovery Units, numbered 1070–1089, which flank an earthen access road running NE–SW through the center of the surveyed area. DUs 1070–1079, which constitute a series of rectangular units lying to the south of the road, are oriented parallel to it. DUs 1080–1089, meanwhile, occupy an area lying on the northern side of the road. In keeping with the direction of plowing there, they are oriented N–S.

Of the sherds recovered during survey, virtually none belong to the period of interest to this thesis. Only 9 such fragments were catalogued, and the majority of these (=5 sherds) cannot be any more specifically dated.

## 5.3. Summary of findings.

In light of these results, it is difficult to posit any very significant Roman-period activity in the area of Marcanzotta. Such, in any event, was the conclusion reached in respect of the findings from Borso, where a similar scarcity of Roman-era ceramics was documented, and there is little reason to expect that the present case should be very different.<sup>513</sup> On the contrary, the ceramics recovered at Marcanzotta are at several points comparable to those from Borso. This is true as regards the

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510. The nearest population center is the frazione of Rattaloro, which lies more than 4 km distant.

511. The only nearby exception are the several fields encircling to the aforementioned farmhouse to the south. Several are planted with olive trees, and others, with garden crops.

512. Per the figures given the directors, if not according to the project GIS: the total expanse of the surveyed area, following rectification of the polygons, is some 8.7 Ha.

513. The ceramic record is, perhaps, not quite so barren as at Borso; among the 4 dateable Roman finds recovered at Marcanzotta is a fragment of a fourth century Keay 25.1 amphora (MA3000). Nevertheless, the quantities involved are such that any perceived difference may be an accident of recovery, rather than an accurate reflection of the area's sherd population (in statistical terms).

relative frequency of *sensu lato* Medieval finds, which were found in virtually every one of the units explored at Marcanzotta. Human activity in the region, in other words, is not a strictly modern phenomenon; but for most of the phases of interest to this thesis, it does not appear to have been very significant, either.

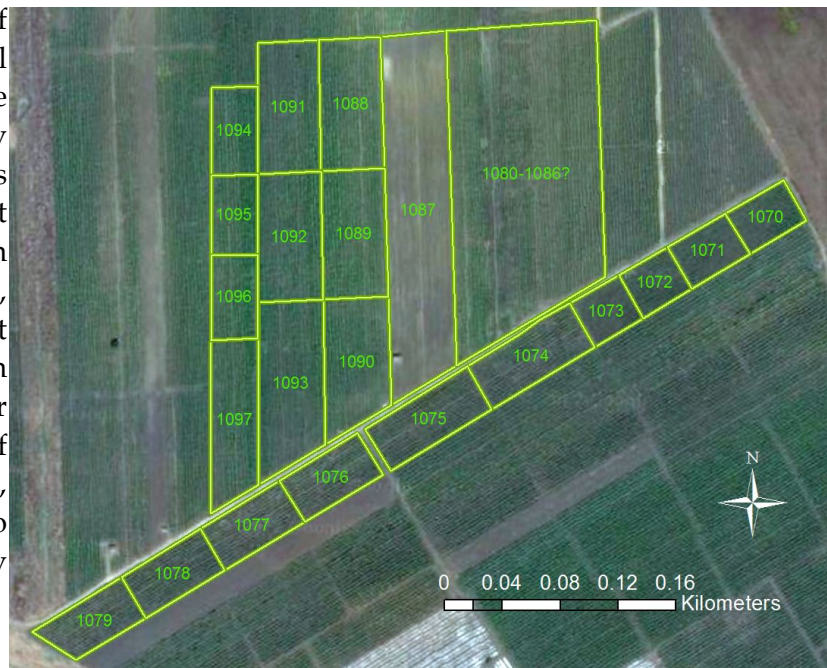


Fig. 24: Marcanzotta survey units.

## 6. Piscitello.

### 6.1. Location and characteristics.

The survey area identified by MHS as "Piscitello" comprises a group of contiguous fields, all of them planted with olive trees, which are located immediately to the south of a village of the same name<sup>514</sup> (Fig. 25). Of the other areas surveyed by MHS, only San Leonardo, from which it is 2 km distant, lies further to the northwest. The site of Piscitello is situated a little more than 2 km east of the Mozia ferry landing and c. 1.75 km south of the northern boundary of the MHS survey universe. Like most of the surrounding area, it is characterized by its low and gentle topography.

<sup>514</sup> I.e., Piscitello, which is defined, in administrative terms, as a frazione of the comune of Marsala. (Marsala itself lies some 5.07 km to the southwest). Further use of "Piscitello", in this and subsequent sections, should be understood as referring to the survey area as defined by MHS, rather the settlement for which it was named.

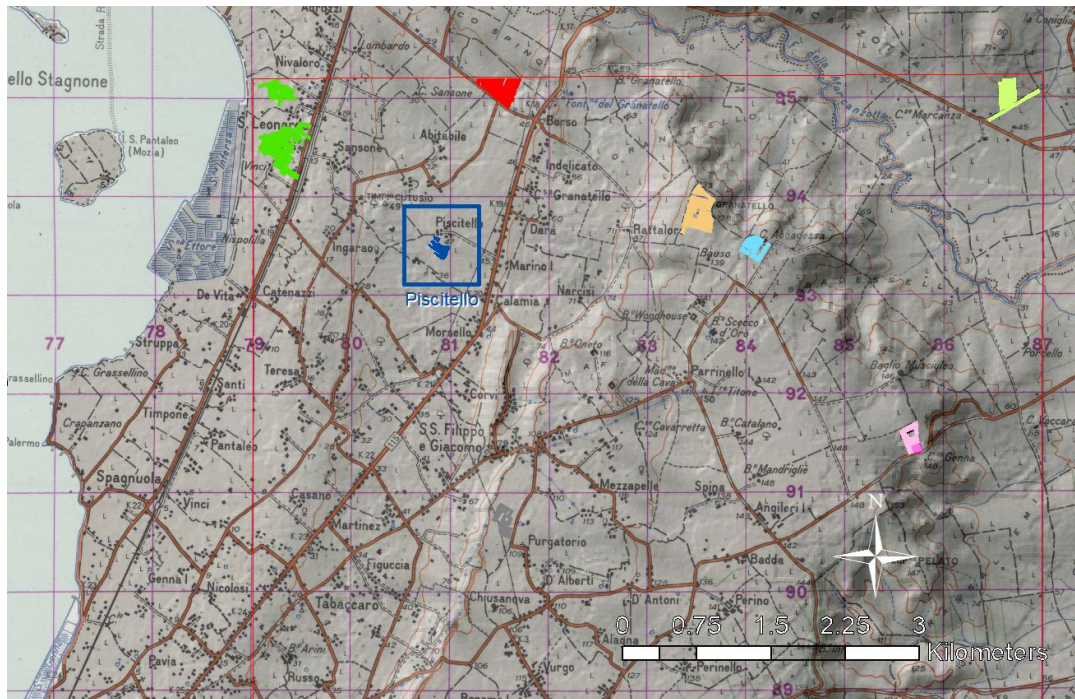


Fig. 25: Piscitello location.

Notwithstanding the fact of a gentle westward slope, the c. 2.25 Ha explored by MHS showed little variation in elevation.

## 6.2. Survey.

Piscitello was designated as an area of possible interest during the 2009 field season, in part on the basis of locals' testimony to the frequency of Roman ceramic remains in the area. Preliminary exploration of the area, which was undertaken during the course of extensive survey, confirmed that such materials were indeed atypically dense. The formal exploration of Piscitello, which lasted two days, began shortly thereafter. During that time, a total of 15 DUs were subjected to intensive survey and collection. Of these fifteen units, which were numbered DU 2201–2215

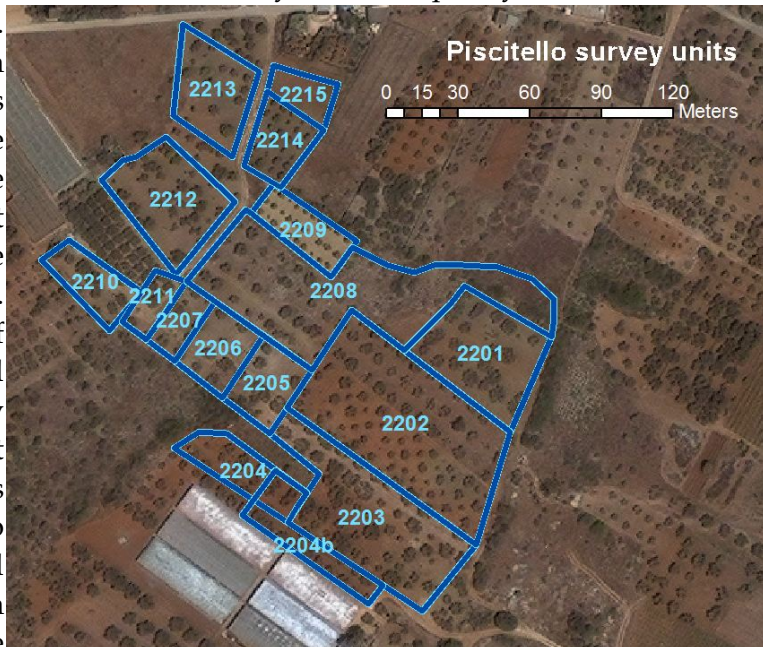


Fig. 26: Piscitello survey units.



(Fig. 26), the finds from five—DUs 2202, 2205, 2206, 2207, and 2210—were sufficiently dense as to merit the maintenance of their separation by tract.<sup>515</sup> Grab finds, meanwhile, were collected from DUs 2205, 2206, and 2207.

In total, the catalogue of finds recovered at Piscitello numbers some 285 sherds. Of these 285 sherds, some 212 were recovered from designated survey tracts, while the remaining 73 were grab finds. As such, the latter do not figure in the following calculations of spatial artifact density.

### 6.3. Quantification and intra-areal distribution.

An analysis of the former 212 sherds, meanwhile, makes several patterns evident. First, and most obviously, is the fact of their uneven distribution across the DUs surveyed at Piscitello (Table 9, Appendix 1). More than 95% (=202 sherds) of the ceramics under discussion were re- covered from three adjacent DUs: 2205, 2206, and 2207. The distribution of the few remaining sherds, which were found in DUs 2202 (5 sherds); 2203 (1 sherd); 2204 (1 sherd); 2208 (2 sherds); and 2210 (1 sherd), only reinforces the impression of concentration. With the addition of DU 2212, which reported no significant finds pertaining to the period of interest, and DU 2211, for which project records are incomplete,<sup>516</sup> the units just mentioned are those which surround DUs 2205–2207 (Fig. 27). As at Genna, this is a pattern defined by its geographic concentration.



Fig. 27: Piscitello tract find concentrations.

515. DU 2202 was divided into five tracts, while 2205, 2206, 2207, and 2210 were each divided into three.

516. In between the 2011 and 2012 field study seasons, the cassettes containing MHS finds were moved from one of the Baglio Anselmi storerooms to another. In the process, it appears, a cassette of materials pertaining to DU 2211 was misplaced.

#### 6.4. Chronology.

The degree to which these activities were *chronologically* concentrated, too, is the subject of this section. For reasons which will shortly become apparent, the corpus of sherds brought to bear may profitably be enlarged to encompass the 73 grab as well as the 212 tract sherds treated in the preceding section. For the sake of consistency, however, we will first consider only the tract finds.

Of the 212 sherds at issue, a total of 170 may be identified with a chronotype. In total, 59 chronotypes were documented, details concerning which appear in the site's chronotype database file. As weighted by sherd count, their respective histochronologies may be averaged to produce one for the assemblage of which they form a part. The latter, which is illustrated in Fig. 28, possesses several noteworthy

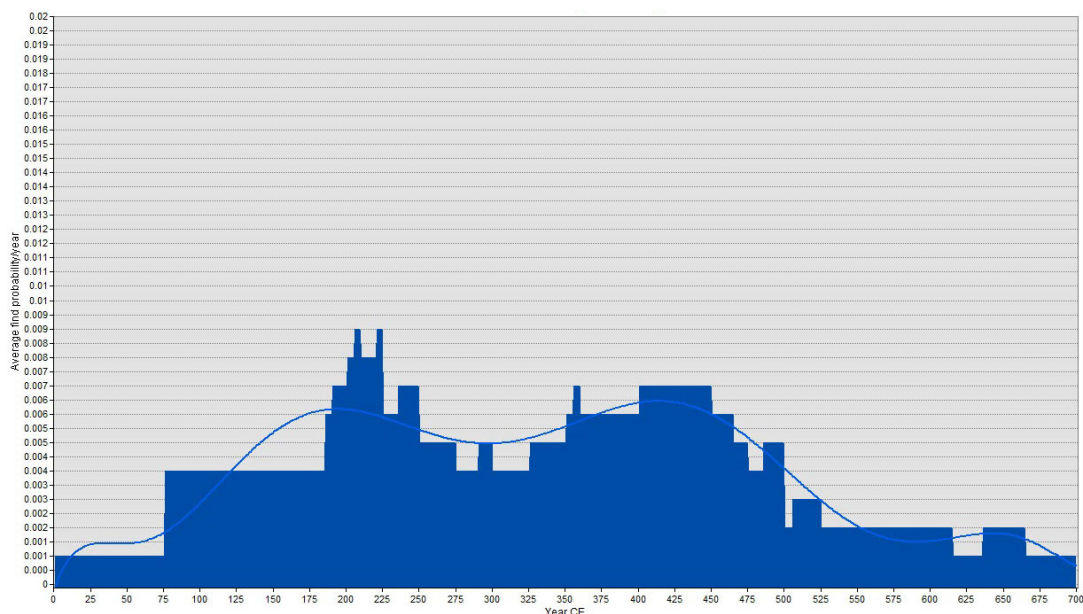


Fig. 28: Piscitello tract sherd assemblage histochronology.

characteristics. First, there is the length of time at issue. Among the 212 tract sherds under consideration are pieces dating, potentially, to the entirety of the first seven centuries (and, very probably, before and after, too.<sup>517</sup>) The relative significance of such testimonia, however—and, in consequence, the probability of activity contemporaneous with their respective chronologies—is neither consistent nor apparently static.

With respect to the period of greatest activity, a clear peak is perceptible between the third–fifth centuries. That said, the somewhat more than two hundred years in question are themselves not uniformly well-attested. On the contrary, the pertinent section of the graph describes a curve which is basically bimodal. The

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517. Notwithstanding the establishment of minimum and maximum x-axis values at 1 and 700 CE, respectively—a decision made primarily for reasons of legibility at scale—a limited number of the chronotypes recovered from Piscitello survey tracts may be dated to periods of time which extend at least partially beyond this range. Among them, by way of example, are the two sherds pertaining to a Dressel 2–4 amphora handle and an unknown Terra Sigillata Italica vessel, respectively. Either or both could as easily have been manufactured in the first century BCE as after the change of era.

ceramic evidence for human activity peaks during the first quarter of the third century, after which it appears to gradually decline. The approximately one hundred years between the second half of the third–first half of the fourth century constitute a sort of "trough", after which relevant testimonia once again multiply in number. On the strength of the evidence to hand, they reach a second peak in the first half of the fifth century.

Similar observations can be made concerning the centuries which bracket this two-century peak. As we have noted, the ceramic evidence suggests that the period in question was stable enough to sustain an apparently-uninterrupted human presence at Piscitello. The left- and rightmost portions of the curve, however, are not merely noteworthy for their length. Notwithstanding their broad resemblance, their shapes are subtly, and I think importantly, different. These discrepancies are most easily perceived if we consider the later period first.

Local activity during the sixth–seventh centuries is clearly much diminished vis-à-vis the fifth century peak which precedes it. It is not, however, radically so. The relative scarcity of testimonia during the period between c. 500–700 is the result of a process of diminution regarding which two things may be said. First, that it was already underway by the middle of the middle of the fifth century, and thus reflects a dynamic which originated *in*—as opposed, that is, to being divergent *from*—the local peak. And second, that it does not seem to have entirely run its course, at least during the centuries under discussion. The evidence for sixth and seventh century activity is scanty, but it is also consistent.<sup>518</sup>

Only the former trend, meanwhile, seems to be reflected in the portion of the graph describing first–second century activity, and then only to a limited degree. During the latter half of the second century, as during the latter half of the fifth, the curve bends to describe a period of transition between the peak period and the phases which bracket it. The *length* of that transition, however, is significantly shortly on the left side of the graph. At a distance of twenty-five years from their respective peaks—corresponding, on the left side of the graph, to 175, and on the right, to 475—the slope of the left- and right tails basically mirror one another. It is not much farther out, however, that this symmetry breaks down. In contrast to the period of decline, post-peak, the increase in testimonia dating to the middle of the second century very quickly begins to look abrupt rather than gradual. It looks, that is, less like a process, and more like an event.

On the basis of the evidence to hand, it is difficult to know whether to call this event a "foundation", or an "establishment", or something else entirely.<sup>519</sup> It does not, however, seem possible to deny that it occurred. This, however, raises a question. What are we to make of the evidence for first-, and especially early second-, century activity on site? The answer, I think, is "less than it appears". It is true, of course, that fully 14 of the 59 documented tract sherd chronotypes (Piscitello chronotype database file) have a chronology which reaches into the first century CE. As reliable

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518. As is, more impressionistically, the evidence for eighth century and later activity, which is suggested by the presence of sherds resembling the Early Medieval cookware mentioned in n. 449.

519. A topic to which I return in III.2.2.

indicators of first century *activity*, however, they are not very persuasive. Only four<sup>520</sup> of the fourteen types in question—corresponding, respectively, to a Dressel 2–4 amphora; an unknown Terra Sigillata Italica form; a local production of thin-walled table wares in the Late Republican–Early Imperial tradition; and a Deneauve type IV lamp—are typically first century ceramics. The remaining 10, meanwhile, consist of productions which are potentially early mostly by virtue of being long-lived. Tellingly, the latter category contains all the best-represented types in terms of sherd count (and, consequently, degree of influence on the shape of the curve). The two most numerous refer, in generic terms, to fragments of "classic" African and Pantellerian cookware (39 and 15 sherds, respectively). As we already had cause to observe, both are as if not more likely to be late, rather than early.<sup>521</sup>

Under the circumstances, we are justified in doubting the significance of first–early second century activity at Piscitello. Enlarging the range of materials susceptible to analysis—by, specifically, considering the 73 grab finds, too—only strengthens such doubts. Compared with the histogram of tract find chronologies,

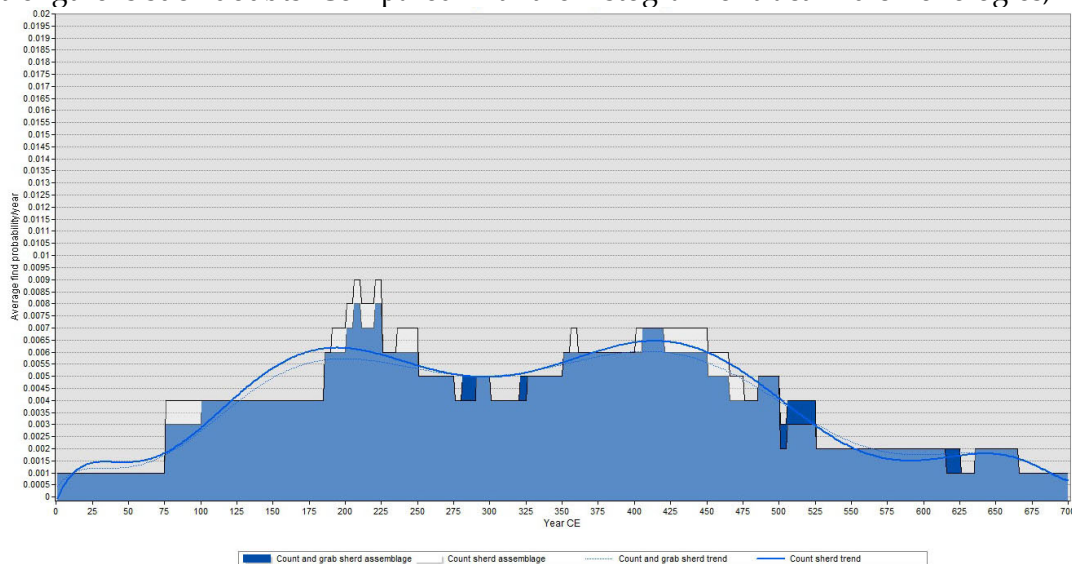


Fig. 29: Piscitello tract (white) and combined tract and grab (blue) sherd assemblage histochronologies.

the histogram of tract– and grab sherds (Fig. 29) differs in two principal ways. First, it depicts a higher probability, and consequently greater plausibility, of sixth–seventh century activity in the area. Second, and more notable in light of the foregoing discussion, it lowers the probability of activity much before the second century. The evidence, to be sure, is insufficient to *disregard* the possibility of activity at Piscitello then. But it goes some distance toward suggesting that such activity was much less intense, and quite probably qualitatively different, than that which followed it—and which, in one form or another, seems to have persisted into the eighth century at least.

520. Or rather, *at most* four. The sole sherd assigned to the chronotype "Deneauve IV OR Bonifay 15 lamp" may—indeed, probably does, in light of arguments made below—constitute an example of the latter rather than the former type. If so, it is a late second, or more likely third, century form: Bonifay 2004: 337.

521. On the chronology of these two wares, see n. 474 and n. 440, respectively.

### 6.5. Function and use.

In certain respects, the remarks made concerning the distribution of ceramic functional classes at Genna are applicable to Piscitello, too.<sup>522</sup> As there, the overwhelming concentration of all ceramic finds effectively means that individual class constituents will be similarly clustered. In consequence, DUs 2205, 2206, and 2207 are not merely the most significant in terms of density of finds. They are also the contexts in which the greatest *variety* of finds was documented, including examples of all of the five major functional classes. As such, they are distinguished not merely for the *intensity* of the activity documented there, but also its probable *range*. The latter, notably, encompasses the suite of practices relating to the preparation, service, and consumption of food and drink, as represented by cooking- and table wares, respectively. Among the latter, moreover, is a numerically-significant (indeed, practically the entire) range of imported table wares. Under the circumstances, it does not seem unreasonable to posit that we are looking at the remains of a (concentrated, durable<sup>523</sup>) place of human habitation.

This is not to say, of course, that the site was purely domestic in character. A range of productive and/or commercial activities are also possible, if not probable, given the occupants' evident access to the fruits of trade, as well as means sufficient to acquire them. The former is to be expected, given the proximity of Piscitello to the heavily-trafficked western coast of the island; as noted in Section II.6.1, the shore lies only a little more than 2 km to the west. In light of our present ignorance concerning the organization and location of fairs and markets in Roman Sicily,<sup>524</sup> we cannot simply discount the possibility of trade on the shore. And in any event, the markets of Lilybaeum lay a mere 9.5 km to the southwest, as the crow flies.<sup>525</sup> The wealth needed to take advantage of such markets, meanwhile, does not seem to have been uncommon—witness the relative frequency of analogous African products even further inland, in the region of Segesta<sup>526</sup>—but neither was it universally enjoyed. All that said, it is the domestic activity which is easiest to localize. The cooking- and table wares implicated therein are predominantly found in the area of the central cluster, and are much less frequent in other parts of Piscitello. The concentration at

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522. See Section 4.5.

523. The former, per discussion in Section 6.3. The latter, inasmuch as the the 285 sherds on which conclusions in Section 6.4 are based come almost entirely from the three DUs presently under discussion. As such, it follows that the chronology posited for Piscitello grosso modo is also valid for its constituent phases.

524. As observed by Cracco Ruggini 1980: 16.

525. Following the modern coastal road, SP21, increases the distance to 10–11 km. Even assuming the greater value, however, this would have been an feasible day trip. In the nineteenth century, it was not uncommon for Sicilian agricultural workers to travel 15 km to reach the fields where worked daily: see Chapter 6, Section V.4., with n. 949. The scanty evidence from antiquity is similarly suggestive. The *Digest's* (*Dig.* 11.1.11, 38.15.2.3, 50.16.3) stipulated time within which to appear in court assumes an overland speed of c. 20 miles/day. Inasmuch as it makes no provision for differences in the type of landscape traversed, this figure may represent a *minimum* speed of overland travel, at least when speed was of paramount importance: Laurence 1999: 82.

526. Cambi 2005.



528. See discussion in Section 6.1.

situated on the shore of the Stagnone more or less opposite the island of Mozia (Fig. 30). As explained elsewhere in this chapter,<sup>529</sup> the presence of Mozia—and its proximity to the site which is the subject of this section—was instrumental in the project directors' decision to make San Leonardo a target for survey. From its position in the northwestern corner of the MHS survey universe, it is less than 1.5 km to the island's eastern coast. Accordingly, San Leonardo is the most proximate of the 3 areas comprising a "stratified sample" of survey sites located along the northern edge of the project's theater of operations. Given the area within which MHS was permitted to work,<sup>530</sup> in fact, San Leonardo is located as near to Mozia as it is possible to get. The next most proximate area—Piscitello, which is also the closest of the other survey sites to San Leonardo—is more than twice as far away, as the crow flies.<sup>531</sup> Borso, which is second of the "stratified sample" sites, is more distant still.<sup>532</sup>

Because of present-day patterns of settlement in the territory of Marsala, San Leonardo is *also* the nearest area to a place of concentrated modern habitation. Indeed, it is noteworthy among the areas explored by MHS for the degree to which modern construction influenced the shape of the surveyed area. The course of its eastern- and southern borders, as well as the fact of a gap between the parts walked in 2008 and 2009,<sup>533</sup> were largely determined by the contours of San Leonardo's urban fabric. In those areas which are *not* occupied by residential (and some utilitarian<sup>534</sup>) buildings, meanwhile, the surface is almost entirely given over to cultivation. As elsewhere in the region, the most frequent cultivar is the grape. The latter's predominance, however, is less complete than in some of the other sites treated in this chapter. Vineyards are sometimes bracketed by, or interpenetrate with, fields planted with a variety of tree- and garden crops.<sup>535</sup>

A full accounting of the factors driving this (locally-noteworthy!) diversity, it seems to me, would have to consider a variety of developments which have little bearing on the present discussion.<sup>536</sup> Among them, however, are several which are germane, including the climatological- and topographical fitness of the area for agriculture.<sup>537</sup> Like Piscitello to its east, San Leonardo is located on the wide, flat coastal plain which dominates the western half of the project survey universe. Topographical relief in the vicinity of San Leonardo is typical of this region. In the

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529. Section II.1.2.

530. See Chapter 1, Section II.1, with n. 5.

531. San Leonardo to Piscitello: c. 2.3 km SE. Piscitello to the eastern coast of Mozia: c. 3.3 km WNW.

532. Borso lies c. 3.7 km east of the eastern coast of Mozia.

533. Details, see Section 7.2 below.

534. Viz., predominantly structures related to agriculture, chief among them greenhouses (one is visible east of DU 2008; another four are located to the east of DUs 2035 and 2036) and utility sheds (two are found in DU 1003).

535. Olive- and fig trees are planted in e.g. a plot to the south of DU 2045, while tomatoes and zucchini (in Sicilian, "cucuzeddi") are cultivated primarily in greenhouses like those mentioned in n. 534.

536. Among other things, the fact of substantial modern investment in agricultural infrastructure. The area is dotted with greenhouses and covered enclosures built to facilitate the cultivation of a greater range of crops than might be grown in the open air.

537. Viz., in the present day. The *historical* fertility of the region, as we have already noted (see Chapter 1, Section II.1), was very probably less noteworthy.



area explored by MHS, elevations are consistently low, and slopes, almost uniformly gentle.<sup>538</sup> As such, there are few natural barriers to expansive cultivation.

## 7.2. Survey.

It is an indication of the interest the area held for MHS that San Leonardo, alone of all the sites explored by the project, was afforded two seasons of survey. In the summer of 2008, project fieldwalkers spent a total of three days (July 1–2, 4) on

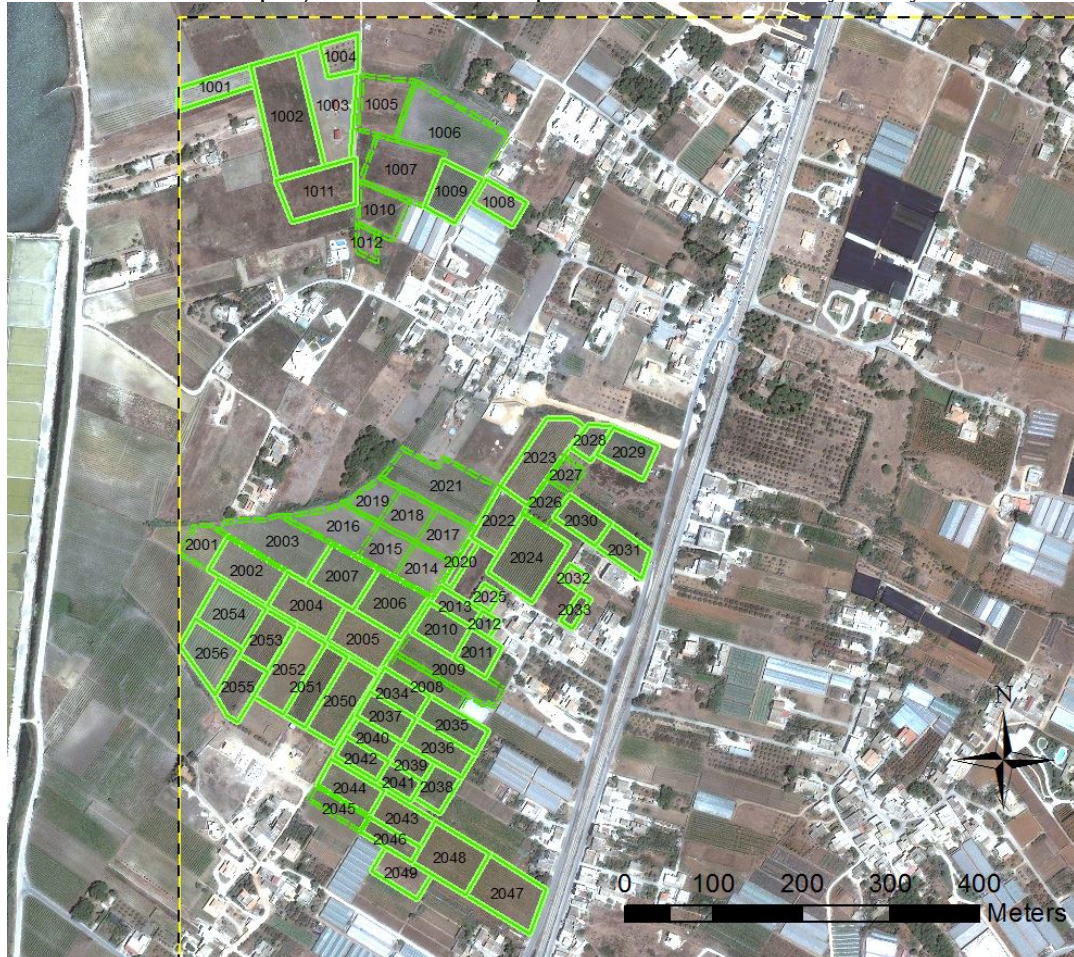


Fig. 31: San Leonardo survey units. 2008 units are to the north, 2009 units to the south.

site. During this time, they surveyed a total of 12<sup>539</sup> Discovery Units (1001–1012; total area: 4.29 Ha) located a little above the northern edge of the nearby Salina Infersa.

In 2009, team members substantially enlarged upon the area surveyed the previous season (See Fig. 31). Over a period of three days (July 9–11) at the beginning of the season, project participants walked some 56 mostly-contiguous DUs, the total area of which was 13.01 Ha. These units, which were numbered 2001–2056, occupy

538. Elevation in the area of San Leonardo ranges between 2–16 m asl (mean: 7.6 m asl), which constitute the lowest minimum and maximum values recorded for any of the areas surveyed by MHS. Slope values, which range between 0°–16°, are a little higher, but the maximum is distinct outlier: the area's mean slope is a mere 1.9°.

539. Cf. the figures provided in Blake & Schon 2010: 52, where the authors state that 11 DUs were covered during the 2008 season, for a total of 3.5 Ha in toto. As project records make clear reference to 12 such units, however, I am inclined to think this is simply a typo.

an irregular expanse of agricultural land located less than 0.2 km to the south of the area surveyed in 2008. Such a gap was basically unavoidable, given the constraints on project members' activity in this part of the survey zone. Expansion to the west or north of DUs 1001–1012 was prohibited by the terms of the project's permit, and the possibilities afforded by extending survey eastward were limited by the density of construction in that direction.<sup>540</sup>

The area ultimately designated for exploration, on the other hand, was eminently well-suited to systematic pedestrian survey. Like the area explored in 2008, it consists almost entirely in modern agricultural fields, the borders of which were often employed to delimit the DUs which overlay them. In keeping with prevailing local crop frequencies, most of the latter were located in fields planted with grape vines.<sup>541</sup>

Happily, given so significant an investment of time and energy, survey in the vicinity of San Leonardo proved to be extremely productive. A number of the units from 2009 were so productive, in fact, that the project directors chose to maintain the separation of materials by tract.<sup>542</sup> And an even larger group of units furnished grab samples alongside those recovered in the area which was actually walked (see below).

The group of ceramics pertaining to the period of this thesis is commensurately large. The catalogue of such sherds includes a total of 588 fragments which were recovered during the course of systematic survey, as well as a further 37 grab samples. I consider this corpus—with, as usual, an emphasis on the quantifiable tract finds—in the following section.

### 7.3. Quantification and intra-areal distribution.

The massive quantity of tract finds from San Leonardo were recovered, according to the project's standard collection protocol, from 55 of the 68 units walked between 2008–2009.<sup>543</sup> The much smaller number of grab finds, meanwhile, were recovered from a group of six DUs, three of which—1006, 1008, 1012—were surveyed in 2008, and three—2003, 2010, and 2011—in 2009.<sup>544</sup> A plurality of these

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540. Consisting, specifically, in the inhabited nucleus along via Torre Lupa—which evidently continues to grow; in the years since MHS acquired the satellite imagery employed in the project GIS, the Case Vacanze Torre Lupa appear to have acquired a large in-ground pool—and a little beyond that, provincial road SP21. It is worth remarking, here, that even absent such impediments, an eastward expansion of survey would not likely have appealed to the project directors. As explained in Section 7.1, their interest in San Leonardo was predicated on its proximity to the coast, and moving eastward would have served to *increase* that distance. On the terms established by the project's permit, see Chapter 1, Section II.1 with n. 5.

541. Including both those which under cultivation at the time of survey and a smaller number which had been allowed to fallow.

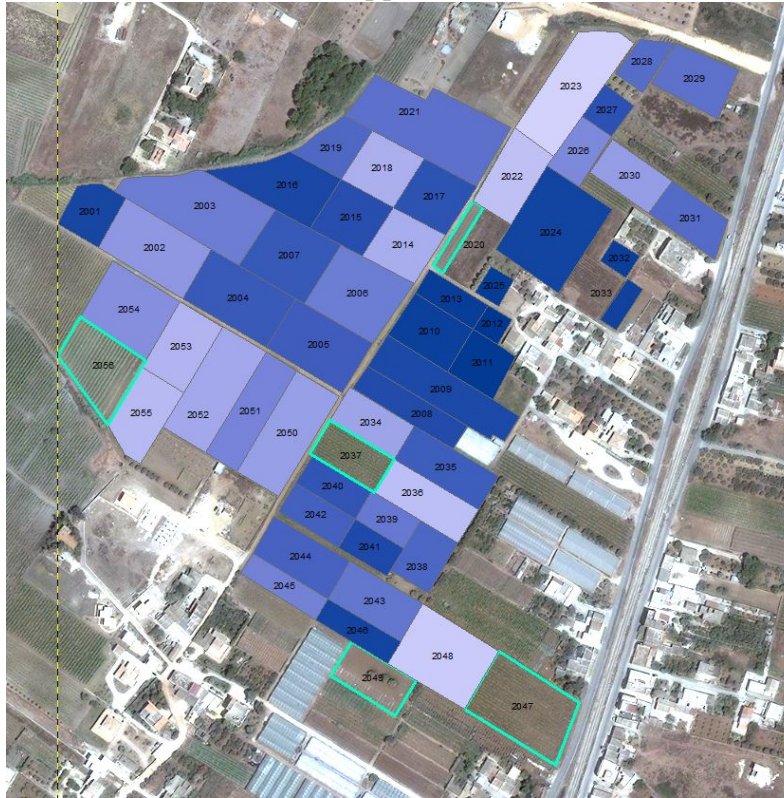
542. Viz., 6 units: DUs 2003, 2010–2013, and 2024. DUs 2003 and 2024 were divided into 5 tracts apiece; 2010 and 2011 contained 4; and 2012–2013, 2. In all but one case, materials pertaining to each of these tracts were kept separate from others from the same unit. The finds from DU 2024, in contrast, were assigned to one of two groups, the first comprising the materials from tracts 1–4, and the second, those from tract 5.

543. Thirteen units reported zero tract finds, eight from 2008 (DUs 1001, 1002, 1003, 1005, 1007, 1009, 1010, and 1011) and 5 from 2009 (DUs 2020, 2037, 2047, 2049, and 2056).

544. A further four units—DUs 2007, 2008, 2013, and 2026—reported grab finds which were not



grabs (=16 sherds, 43% of total) were documented in two DUs (2010 and 2011) whence, as we will see, a significant number of tract finds also emerged. An even greater number (=18 sherds, 49% of total), however, were found in three DUs (1006, 1008, and 1012) which supplied a mere handful of the tract finds which were



ultimately catalogued.<sup>545</sup> This imbalance is a useful reminder that perceived distributions of surface remains are as powerfully affected by observer, or methodological, biases as they are by the patterns observed. In this case, the presence of (predominantly Early Imperial) materials in the area of DU 1012 is invisible if we limit our gaze to to the corpus of sherds collected during formal survey. Many of the ceramic remains recovered from this area of

activity were collected as grab, rather than tract, finds,<sup>547</sup> and consequently do not enter into the quantitative analyses to which the latter are subject.

With respect to the tract finds, the story is once again one of concentration, albeit in a different part of the surveyed area (Fig. 32). Of the 588 sherds catalogued as tract finds, two-thirds (=388 sherds, 66% of total) were found in a group of four adjacent survey units (See Table 10, Appendix 1). DUs 2010, 2011, 2012, and 2013, which cumulatively occupy a mere 3% of the area surveyed at San Leonardo, are unmistakably its center of gravity. Considerations of find density, rather than raw artifact counts, only reinforce this impression. The average sherd density within DUs 2010–2013 is a factor of *twelve* greater than that recorded for San Leonardo as a whole.<sup>548</sup> And it is surely significant that, of the next four most-

ultimately catalogued.

545. Viz., five sherds: two from DU 1006, one from 1008, and two from 1012.

546. For purposes of legibility, I depict only the 2009 units within which the local center is located. (DU numbers referenced later on are otherwise too small to be easily read when the view is widened sufficiently to encompass both areas.)

547. For reasons which I have not yet been able to ascertain. Doing so—which I expect will be possible, pending continued correspondence with the project directors—would allow the finds from this area to be integrated with a greater degree of confidence.

548. Viz., 8829 sherds/Ha vs. 723 sherds/Ha. The picture changes only slightly if we exclude the more

productive DUs—2009, 2016, 2024, and 2025, which, alone of the remaining survey units, reported double-digit finds—three (2009, 2024, and 2025) are adjacent to the nucleus at 2010–2013. Under the circumstances, they should probably be understood as constituting the periphery of the concentration they surround. Whatever the significance of each of these zones, their existence is indicative of a measure of intra-site articulation.

What of the remaining third of the sherds recovered at San Leonardo? If we focus, for the moment, on the units surveyed in 2009,<sup>549</sup> the most immediate impression is one of widely-dispersed small quantities. Of the 48 other units surveyed in 2009, five (DUs 2020, 2037, 2047, 2049, and 2056) contributed zero catalogued sherds, and 43, between 1–6. The more-or-less scattered distribution of these finds cannot be explained simply as a function of distance from the center of the distribution. This is not to say, however, that it is unpatterned. The modest cluster of finds recovered from DUs 2004, 2005, 2007, 2015, and 2016, which lie to the west of the primary concentration, may be a result of the local topography. To the degree that it is possible, given San Leonardo's uniformly gentle relief,<sup>550</sup> to speak of a "plateau", the remains at DUs 2010–2013 lie at its western edge, and DUs 2004, 2005, 2007, 2015, and 2016 are located at the base of its western slope. The gradient of this incline is so slight that, under normal circumstances, we would not expect it to contribute to a meaningful lateral displacement of surface remains. In this case, however, an additional factor must be considered. The surface of the slope in question is occupied by vineyards, and their rows are oriented parallel to the direction of the slope on which they lie. As a result, the act of plowing may have encouraged a greater measure of downslope displacement.<sup>551</sup> Given the local direction of slope, and the latitude of the concentration at 2010–2013, a similar process may have contributed to the formation of this secondary concentration. As in the case of DUs 2009, 2024, and 2025, however, we cannot disregard the possibility that it was a result of historical patterns of use.

With regard to the place of *primary* concentration, explanations are even harder to come by. Nevertheless, there are good reasons to expect that the local topography was influential here, too. Owing to its relatively greater altitude, the area of DUs 2010–2013 would have enjoyed an advantageous view of the coast. And if, as now, the coastal plain contained some productive farmland, it would be reasonable to avoid occupying surface area that could be employed for cultivation.

#### 7.4. Chronology.

For information concerning the chronology of all this activity, we have recourse to a (usefully large) subset of the 588 catalogued tract finds treated above. More or less specific chronologies can be assigned to a group of 473 sherds (c. 80% of total). These sherds comprise 96 distinct chronotypes, details concerning which

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distant, and relatively unproductive, units surveyed in 2008; DUs 2001–2056 have a mean sherd density of 871 sherds/Ha.

549. As mentioned above, the significance of grab finds in the units surveyed in 2008 suggests a degree of methodological incommensurability with those explored in 2009.

550. Details, see Section 7.1.

551. See n. 432 and especially n. 436.

appear in the San Leonardo chonotype database file. After being weighted by sherd count, their annual find probabilities may be averaged to produce a chronology for

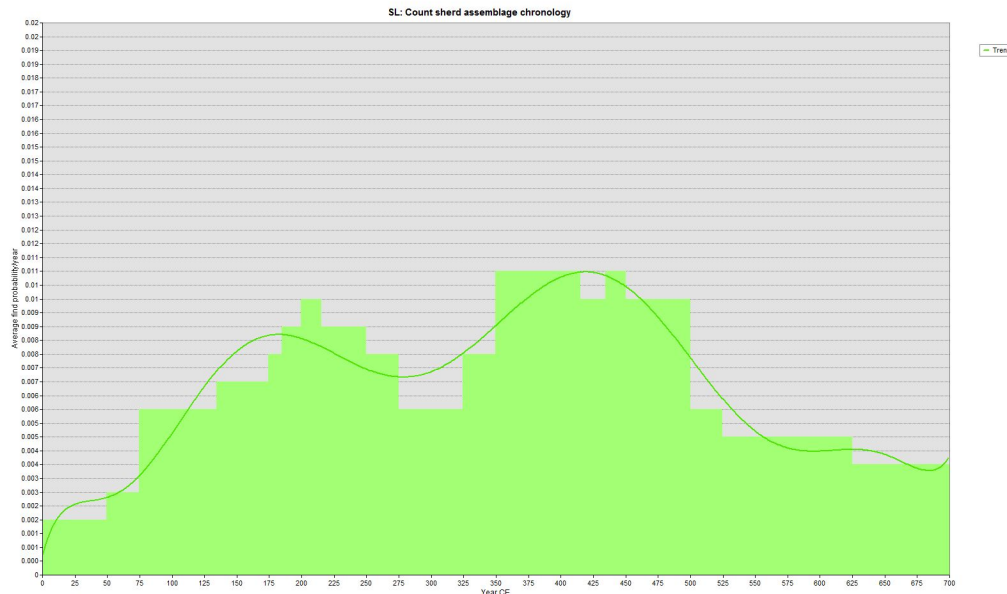


Fig. 33: San Leonardo tract sherds assemblage histogram.

the assemblage. This is depicted in Fig. 33, the shape of which corresponds to a pattern we have seen elsewhere in the MHS survey universe. The chronology of the tract finds catalogued at San Leonardo—and so, presumably, of San Leonardo itself, albeit with certain reservations discussed further on—is one in which a phase of comparatively more significant human activity may be discerned. The interval in question spans the period of more than three centuries between the last quarter of the second–end of the fifth century. The frequency and significance of ceramic tes–

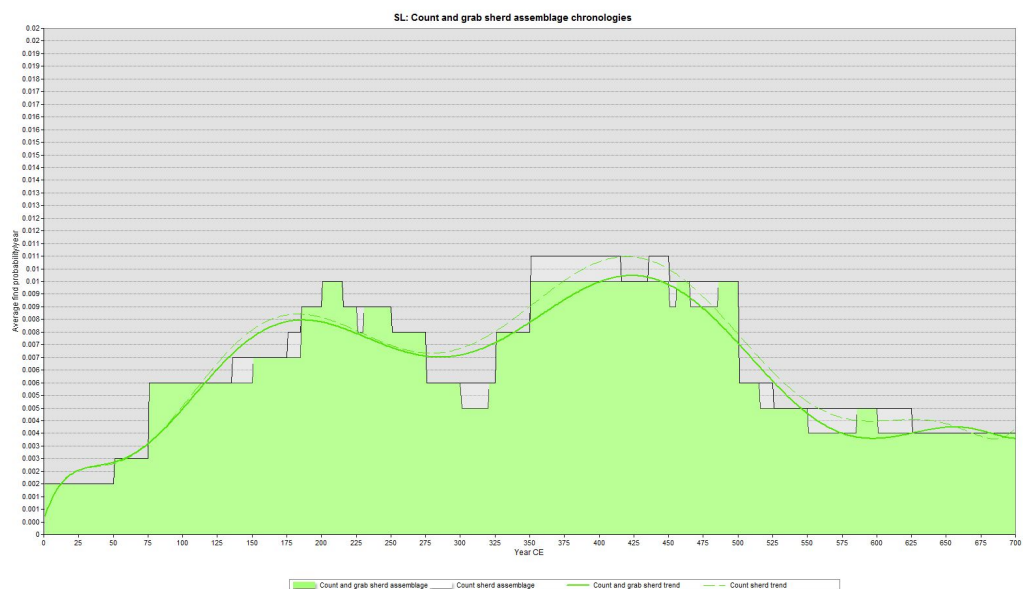


Fig. 34: San Leonardo tract (white) and combined tract and grab (green) sherds assemblage histogram.

timonia for this period varies across the centuries in question, however. As depicted in Fig. 33, the curve is bimodal. During the first three quarters of the first century,

and especially during the first fifty years thereof, finds are relatively scarce. Thereafter, however, they appear to increase. A first peak occurs around the end of the second–beginning of the third century, after which testimonia decline, notably if not precipitously in number. The subsequent trough continues through the first quarter of the fourth century, at which point the curve begins to rise again. It peaks a second time during the first half of the fifth century before once again falling, this time more dramatically. Between the end of the fifth–beginning of the sixth century, the number and significance of dateable sherds decreases to a level which is comparable with, albeit slightly lower than, the early fourth century trough which preceded it. It does not, however, appear to fall to the level observed during the early second and especially first centuries. Furthermore, it remains basically stable for the balance of the period under consideration.

As already intimated, the series of developments just summarized is one we have previously encountered. The chronology of human activity at Piscitello is similar in a variety of respects.<sup>552</sup> As at San Leonardo, the ceramic testimonia are bimodally distributed. Moreover, the periodization of Piscitello's first and second peaks, and indeed the trough intervening between them, is basically congruent. Grosso modo, it is probably reasonable to assume that the same goes for the two areas' settlement histories, too. Human activity at San Leonardo peaks, and subsequently declines, at the same time as it does at Piscitello; but (again, as at Piscitello) it does not thereafter seem to disappear.

Alongside these similarities, however, are a number of differences. Perhaps the most obvious concerns the relative height of the areas' two peaks. In comparison with Piscitello, ceramic testimonia at San Leonardo speak to a relatively more significant second peak period. The impression is strongest when, as illustrated in Fig. 33, we consider only tract sherds; in that case, the second peak appears to be *higher* than the first. If we also take into consideration the grab sherds, the two peaks are more nearly equal in height (Fig. 34). Even so, it seems that the second period was locally more significant than elsewhere: a fact to which I return in Section III.2.2. A second difference concerns the period preceding the first peak. In respect of Piscitello, I have argued that the increase in testimonia leading up to that point was likely to have been pretty abrupt: to have constituted an "event" rather than a "process".<sup>553</sup> At San Leonardo, meanwhile, it was pretty clearly the latter. The portion of the curve corresponding to the first–third centuries describes a process of relatively gradual increase. An explanation for this difference is probably to be sought in the fact that, as noted above, human habitation at San Leonardo was a fact of demonstrably early vintage.<sup>554</sup> That said, it is worth drawing attention to a *discontinuity* which Fig. 33 fails to convey. The second–third century intensification of activity in the region did not affect all of San Leonardo equally. In particular, DU 1012—that is, the area where evidence for pre-existing settlement is *strongest*—seems to have been almost entirely exempted from the local spur to development. There is

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552. Details, see Section 6.4.

553. Section 6.4.

554. N.b. once again that this period of habitation, indeed this site, is downplayed if we only consider the tract finds.



little to suggest that the area remained a locus of human activity much past the second century.<sup>555</sup> This, of course, is the moment at which DUs 2010–2013 were growing into a place of concentrated human settlement. It is difficult to know whether we are looking at a simple displacement of the original population; the entrée of another; or both, but it does not seem possible to contest that the local focus of human activity shifted.

#### 7.5. Function and use.

As might be expected, given the density of finds at the nucleus, the distribution of sherds belonging to each functional class is nearly as clustered as the distribution of all catalogued Roman tract finds. In three cases—pertaining to the sherds classified as common- or cooking ware, fine table ware, and lamps (Fig. 35)—the concentration of finds in the area of DUs 2010–2013 is actually *more* pronounced than it is for the set of all catalogued sherds.<sup>556</sup> The importance of this area is perceptible even when we consider the least-concentrated class of ceramic remains. Fully 45% of the tract sherds identified as amphorae are also located in the same

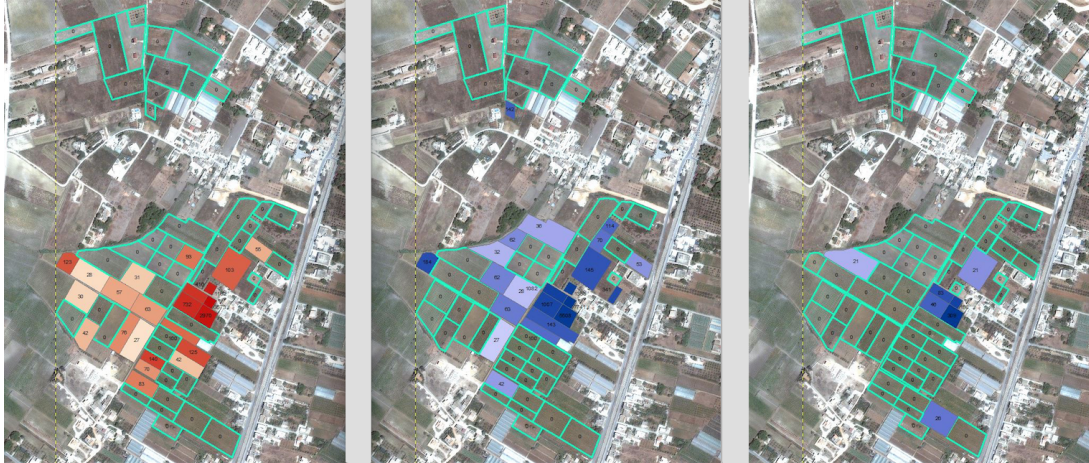


Fig. 35: Density distribution of common wares (left); finewares (center); and lamps (right).

small area (Fig. #). This sort of distribution—in which the concentration of finds is not merely a question of quantity, but of variety, too—is one we have encountered elsewhere in the MHS survey universe.<sup>557</sup> Two observations are worth making here. First, it appears that the concentration at DUs 2010–2013 represented the locus of the most intense, and also the most varied, human activity at Roman San Leonardo. And second, several sorts of activity seem to have been *especially* concentrated. The local frequency of table- and cooking wares, and their virtual absence from the remainder of the surveyed area, suggests that the suite of tasks associated with food preparation and –service was highly localized. It does not seem too audacious, under the circumstances, to conclude that the cluster in question represented a, if not actually *the*, site of local Roman settlement.<sup>558</sup>

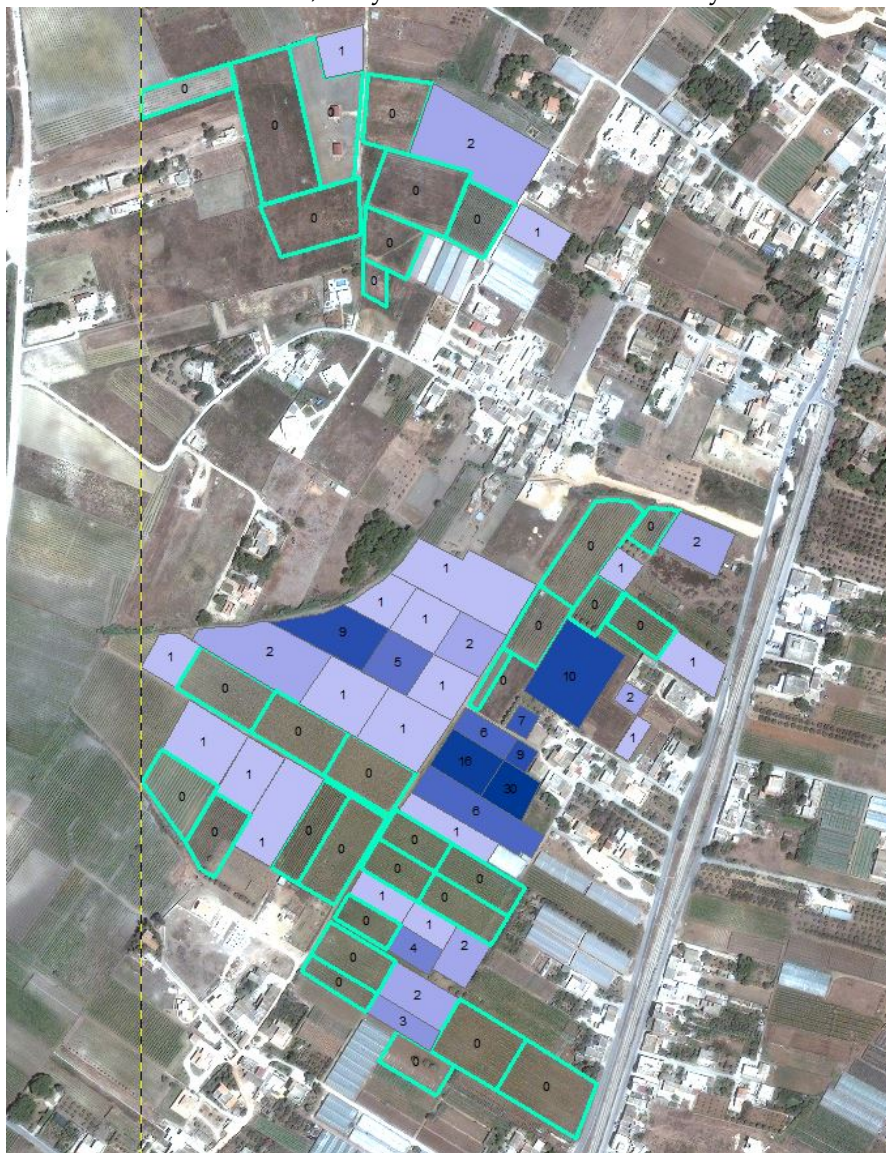
555. As noted already by Blake & Schon 2010: 60.

556. By raw counts, Common ware: 70% (87/125); fine wares: 80% (163/204); lamps: 73% (8/11).

557. Specifically, at Genna (II.4.3) and Piscitello (II.6.3).

558. Aside, obviously, from the site at DU 1012. Chronologically speaking, however, this last largely predates the phase of settlement to which 2010–2013 corresponds: thence my proposal that the ascendance of the latter represented a displacement of local activity.

The distribution of sherds pertaining to some of our other classes, meanwhile, is less easily explained in function of simple concentration at the nucleus (or distance therefrom). This is truest of the amphorae, significant numbers of which were documented elsewhere in the area. More than half of the surveyed units (=36/68, c. 53% of total) recorded at least one such catalogued sherd, and a few—including DUs 2015, 2016, 2024, and 2025—reported five or more. Perhaps more interesting, given the proximity of these last to the main cluster, are the handful of sherds discovered in units at a greater distance to the south; west; and north of DUs 2010–2013. With the exception of the western cluster, the formation of which, I have already posited, was influenced by the local topography, it is difficult to satisfactorily explain these other apparent concentrations. Their location upslope, at more or less the altitude of the main concentration, may have been influenced by the same sort of preferences



which were at work in the siting of the settlement at DUs 2010–2013. If so, one might reasonably wonder whether human activity in the region was concentrated, not at a single point, but along an axis. A similar arrangement, after all, is reflected in the modern pattern of settlement. To my mind, however, there is a more compelling alternative. San Leonardo is close to one of Roman Lilybaeum's three harbors, the northernmost of

Fig. 36: Distribution of amphora sherds catalogued at San Leonardo. which occupied the part of the Stagnone between the southern end of Isola Grande; the northern tip



of Punta d'Alga; and the shore.<sup>559</sup> At minimum, its proximity gave it access to a wider than normal range of international trade goods.<sup>560</sup> But the ubiquity of amphorae suggests a still-stronger link. SL may have served as an entrepôt for goods which were later to be transported further inland. Certain evidence for the use of this port does not, at present, extend beyond the second century,<sup>561</sup> but perhaps it should be pushed forward. Time, and very probably excavation, will be required to tell.

## 8. Timpone Granatello.

### 8.1. Location and characteristics.

"Timpone Granatello" is the name used by MHS to refer to an area located in the northeastern part of the project survey universe (Fig. 37). It describes a group of agricultural fields situated a little less than 1.5 km to the south of the project survey universe's northern border. Latitudinally speaking, it lies midway between the

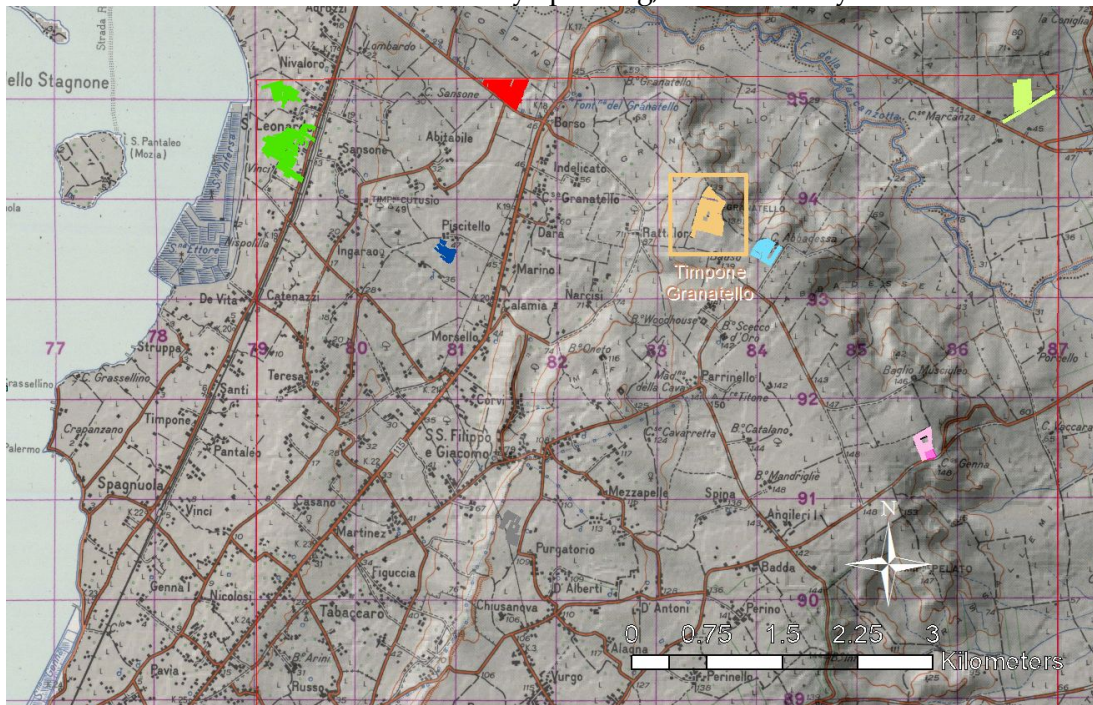


Fig. 37: Timpone Granatello location.

"stratified sample"<sup>562</sup> of San Leonardo, Borso, and Marcanzotta, at the northern edge of the survey universe, and Piscitello and Casa Abbadessa, which are approximately half a kilometer further south. Like Casa Abbadessa—which, at less than half a kilometer to the southeast, is the nearest of the other seven areas surveyed by MHS<sup>563</sup>—Timpone Granatello lies on a plateau. Its eastern- and western edges

559. Analysis of aerial photography (see Schmiedt 1970: Tav. XCIX) shows that the harbor was originally closed; the submerged remains of a breakwater extend some 2400 m (!) between Punta d'Alga and the southern tip of Isola Grande. On Lilybaeum's other two ports, see Di Stefano 1993: 13–17.

560. The only fragment of PRS to be positively identified (SL3027; see Appendix 2) was discovered at SL.

561. Giglio 1997: 74.

562. Discussion, see Section II.1.2.

563. The shortest distance between the two areas—viz., between the southeastern corner of Timpone

delimit the longitudinal extent of the surveyed area, the altitude of which varies between 126–138 m asl. The highest point is located near the southeastern corner of the surveyed area. Owing to its proximity to the edge of the plateau, this is an area of atypically steep slopes (9°–15°). Elsewhere, however, the area of Timpone Granatello is pretty flat. Slopes do not generally exceed 5°, and most are gentler still.<sup>564</sup> In respect of direction of incline, two trends exist. Grosso modo, slopes in the northern– and eastern parts of the surveyed area face to the east, while those in the southern and western parts face to the west.<sup>565</sup>

As regards land use, Timpone Granatello is unexceptional for the region. Like Casa Abbadessa (and, indeed, most of the areas explored by MHS) it consists in uninhabited agricultural land.<sup>566</sup> Virtually all of the surface area is planted with wine grapes.<sup>567</sup>

## 8.2. Survey.

Concurrent with the survey of Casa Abbadessa, MHS project participants explored a total of 9.07 Ha in the area

of Timpone Granatello.<sup>568</sup> That area comprises 31 Discovery Units which were numbered 2101–2131 (Fig. 38).<sup>569</sup> Most of these DUs correspond to larger– or smaller subdivisions of active vineyards.<sup>570</sup> These vineyards are mostly contiguous, but in



Fig. 38: Timpone Granatello survey units.

Granatello DU 2134 and Casa Abbadessa DU 2150—is a less than 350 m, as the crow flies. (I cannot, at present, be more specific than this, owing to the fact that the westward extent of DU 2150 remains to be fixed: information to hand regarding its perimeter emerges from GPS measurements made in the field, and as yet uncorrected for margin of error.) This is comparable to the distance (c. 200 m) separating the non-contiguous sections of San Leonardo. As such, there is an argument to be made for treating these two areas in a somewhat more holistic fashion that I have here. In the meantime, I moot some thoughts rooted in this observation: see II.8.5.

564. Viz., between 0–2°.

565. The former case comprises some areas which are inclined to the north– and southeast, while the latter includes slopes varying between north–southwest.

566. Albeit not inaccessible; the nearest modern settlement, the frazione of Rattaloro, lies a scant 0.5 km to the west, and the nineteenth-century Baglio Woodhouse, 1 km to the south.

567. With the certain exception of one field (corresponding to DU 2119) which is planted with olive trees and the possible exception of three fields which lay fallow at the time of survey (on which see n. 571).

568. Details, Section II.2.2.

569. As noted above (Section 2.2), this series was continued for the DUs explored at Casa Abbadessa.

570. The sole certain exception, DU 2119, has already been mentioned: see n. 567.

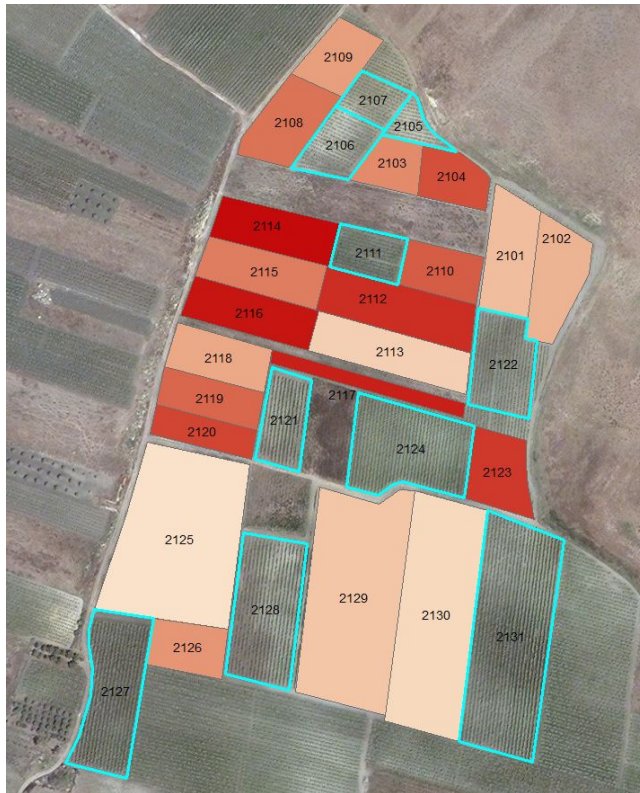


several instances they are separated by the presence of either fallow fields or tractor paths, neither of which were surveyed.<sup>571</sup> As a result, coverage within the surveyed area is somewhat less than complete.

Only a modest number of the sherds recovered by MHS pertain to the period of this thesis' interest. In total, some 43 were catalogued.

### 8.3. Quantification and intra-areal distribution.

In view of the extent of the surveyed area, such numbers make for a commensurately low density of finds. The greatest attested density of Roman ceramic finds, which occurs in DU 2114, is a mere 171 sherds/Ha. This is several



orders of magnitude lower than the greatest attested density of finds at e.g. Piscitello.<sup>572</sup> Perhaps more significantly, it is also a great deal lower than the 1857 sherds/Ha attested at the nearby site of Casa Abbadessa.<sup>573</sup>

This is not only way in which the data from the two areas differ. In absolute as well as weighted terms, the number of catalogued finds varies a great deal less at Timpone Granatello. This is primarily due to the fact that Timpone Granatello is characterized by a paucity of locally-significant places of concentration (Table 11, Appendix 1). The most productive DU, 2112, reported a mere five sherds, and the remainder of the documented finds are pretty well distributed a-

cross the area of Timpone Granatello. Of the thirty-one units surveyed, fully 21 (=68%) reported at least one find from the period under discussion. Moreover, the ten units which reported no catalogued sherds are themselves evenly scattered throughout the area (Fig. 39, units outlined in blue). To the degree that a trend is perceptible, the density of finds appears to be greater in the northern part of Timpone Granatello than in the south. It is also, perhaps, greater in the west than in the east, though here the trend is less visually

571. Three fields lay fallow during the period of MHS activity in the area. They include a long, thin field located between DUs 2103, 2104, 206, and 2108, to the north, and 2110, 2111, and 2114, to the south; a smaller rectangular field, oriented NNE-SSW, between DUs 2121 and 2124; and a more nearly square field surrounded by DUs 2121, 2125, 2128, and 2129. Their sum area is approximately 0.88 Ha. A further 0.16 Ha corresponds to the tractor path which runs generally ESE-WNW across the southern half of the surveyed area.

572. Viz., in DU 2206, where 96 sherds were discovered in an area of 0.8 Ha: 12000 sherds/Ha.

573. For DU 2139.

striking.<sup>574</sup> Needless to say, the latter two observations are impressionistic, rather than quantitative, in character. Were the corpus of documented sherds larger, we might wish to make a statistical test of their plausibility. In view of the limited sample size, however, it is probable that the power of any calculated statistic would be too low to warrant the effort. Under the circumstances, it must be sufficient to note that the distribution of Roman finds at Timpone Granatello is, in the first place, sparse; and in the second place, more even than not. In Bintliff and Snodgrass' terms,<sup>575</sup> it looks like an "unbroken carpet", albeit a threadbare one.

#### 8.4. Chronology.

Unsurprisingly, given the paucity of ceramic remains in the vicinity of Timpone Granatello, the number and range of dateable sherds is also limited. Of the 43 sherds catalogued, a little less than three-quarters (=30 sherds, c. 70% of total) may be characterized as

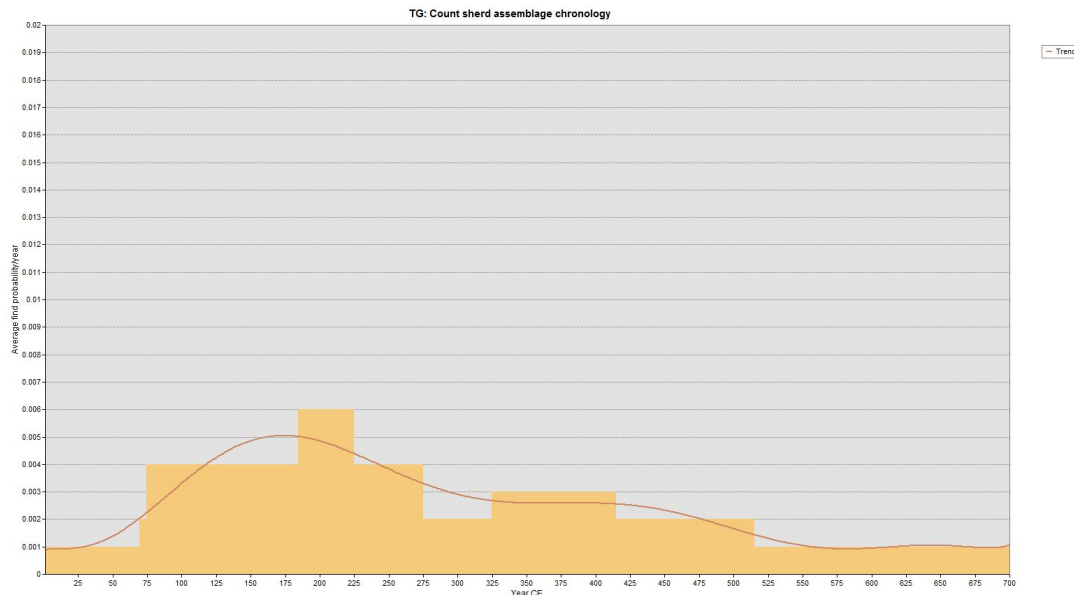


Fig. 40: Timpone Granatello tract sherd assemblage histochronology.

belonging to one of fifteen chronotypes (see chronotype database file). The chronology of activity they suggest for Timpone Granatello, meanwhile, is represented by Fig. 40. In aggregate, the ceramic testimonia are most numerous—and the probability of human activity thus greatest—during the late first–late third centuries. Thereafter, it would appear, the number and significance of finds declines. It does not, however, entirely disappear, or simply level off. Following a trough at the end of the third century, there is a second, less pronounced rise during the fourth. The fifth and later centuries are characterized by progressively lower quantities of finds.

574. And not merely on account of the less consistent patterning. The concentration of finds at DU 2123, which is located on the eastern edge of Timpone Granatello, constitutes an obvious exception. (Albeit one for which some explanation may, perhaps, be advanced; see Section II.8.5, with n. 583.)

575. Bintliff & Snodgrass 1988: 506.

Grosso modo, these trends bear some resemblance to those observed at Casa Abbadessa.<sup>576</sup> Given the proximity of the latter site, as well as its basically-similar geography, this makes a certain amount of sense. It is not merely in respect of their *apparent* chronologies, however, that the two areas are similar. The dateable types from Timpone Granatello, like those from Casa Abbadessa, are such that we are justified in questioning whether Fig. 40 is an entirely accurate, or as importantly complete, representation of both areas' chronology. First, it is dominated by a handful of chronotypes which are exceptionally long-lived. And second, the types which *can* be precisely dated are basically all early.<sup>577</sup> Under the circumstances, it seems probable that the first-third century peak in activity is smaller than it ought to be. Middle- and Late Roman activity, conversely, may be made to seem more significant than it actually was. The evidence is unlikely to be entirely chimerical—among the finds is a fragment of sixth- or seventh century date<sup>578</sup>—but it is sparse.

If, furthermore, we adduce the (admittedly more problematic) evidence provided by those sherds which I have *not* catalogued, a third point of resemblance may be suggested. As at Casa Abbadessa, it is possible that we are in an area whose periods of most significant activity lie outside the interval of seven centuries considered in this thesis. Here, too, were recovered a quantity of probably-Medieval sherds, among them fragments resembling the early Medieval cooking wares I have seen elsewhere. Needless to say, a more careful reckoning is to be desired.

#### 8.5. Function and use.

As we have already cause to remark, the modest quantity of catalogued sherds recovered by MHS does not easily lend itself to statistical analysis. This limitation is a fortiori more serious for any subset of these materials, as for example is constituted by the groups of sherds belonging to the functional classes considered in this thesis. As in Section 8.3, we must content ourselves with adducing what are, essentially, impressions. One such concerns the range of functional classes attested at Timpone Granatello.

Like in the neighboring area of Casa Abbadessa, ceramic lamps are conspicuous by their absence. The classes which *are* present, meanwhile, are interestingly proportioned. In contrast to the situation at e.g. Piscitello, where amphorae and fine wares are almost certainly over-represented, they form a smaller part of the assemblage at Timpone Granatello. Instead, the largest classes are utilitarian pots—13 sherds, of which 11 pertain to (primarily imported<sup>579</sup>) cooking wares—and unknowns, which also number 13. Comparatively little can be said about the latter, most of which—the ARS 91 D/mortarium sherd is an obvious

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576. Section 2.4.

577. Among them, 1 fragment of ARS A 2 fabric (176–275); a fragmentary ARS vessel of form 14, 18, or 27 (186–225); 1 fragment of TSI (49 BCE–150 CE); a fragmentary local thin-walled vessel (124 BCE–200 CE); and a fragment of what is either ARS A or African cookware (76–275).

578. Pertaining to either a ARS 91 D bowl (late sixth–seventh century: Bonifay 2004: 179; Reynolds 1995: 31) or a Carthage Class 1 B common ware mortarium (beginning–middle of the sixth century: Bonifay 2004: 179; Fulford & Peacock 1984: 199; Reynolds 1995: 252).

579. Including 7 of African manufacture and 2 from Pantelleria. The remaining two fragments represent an unidentified cooking ware production which is probably local.

exception<sup>580</sup>—cannot be identified with certainty. Several are plausibly of North African origin, to judge by the fabric,<sup>581</sup> but are too little preserved to more specifically characterize. Alongside these remains, of course, are a smaller number of more distinctive types, chiefly amphorae (9 sherds) and fine ware (7 sherds). To the degree, however, that they are indicative of particular sorts of behavior, it is basically all early. As already observed, the most-closely dateable types are from the earliest phases of local Roman presence. If the more recent remains are not simply spurious, however—and, given the (limited) presence of sherds like the mortarium just mentioned, I do not think they are—then they do not merely describe a phase of reduced activity. They suggest that the site underwent a kind of evolution. The range, if not the number, of early finds—which, together, attest to the importation and storage of produce; the preparation of food; and its consumption, in at least minimally presentable fashion—is compatible with a small settlement, perhaps a farm house. The later materials, in contrast, suggest a more modest—perhaps even transient?<sup>582</sup>—presence.

When viewed in this light, the late re-intensification of activity suggested by Fig. 40 takes on a different complexion. Rather than constituting a settlement per se, Timpone Granatello may have been re-activated in response to the exigencies of *another* settlement. The identity of the latter, of course, cannot be known, but some speculation is possible. Casa Abbadessa, as we have already observed, seems to have experienced a more or less contemporary reinvigoration; perhaps it was an irradiation of that site? Alternatively, both sites may have served Genna. Their location on the northeastern edge of Genna's plateau would have fitted them for use as look-out points.<sup>583</sup> Or they could have been used as day camps by workers traveling from their homes at Genna.<sup>584</sup> Regardless of the specifics, the possibility of such a relationship is ipso facto interesting. In contrast to the situation at e.g. SL, where we have noted a measure of apparent *intra*-site articulation, here we have the prospect of a similar relationship between different sites.

### III. Synthesis.

It should be clear, given the ruminations just aired, that Timpone Granatello's occupational history cannot really be understood in isolation. The (frequently more copious) evidence for Roman-period activity documented at other MHS survey sites

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580. see n. 578.

581. Viz., the 4 sherds characterized as pertaining to either African cookware or ARS A forms. The fabric of these two productions is essentially identical, and in the absence of the slip which characterizes the latter—or evidence of burning, which is more typical of the former—it is difficult to distinguish between them.

582. My experience with the Roman material from Timpone Granatello is that tile fragments were less frequent here than at most of the other sites. If this is so, we might reasonably guess that the area was characterized by correspondingly more limited construction. Without full project numbers, however, it is impossible to be sure that they are indeed sparser here than elsewhere—and, in the absence of specific knowledge of tile chronology, that they were not actually Roman in date.

583. This would help to explain the notable concentration of finds in DU 2123. Its location at the eastern edge of the plateau meant that it was a fitting place from which to observe the plains further inland.

584. In keeping with the image of migrant farmhands I moot in Chapter 6, Section V.4.



demonstrates that Timpone Granatello constituted but a single locus in a landscape which, to all appearances, was pretty extensively populated. The real extent of its habitation, of course, is not a question we should expect to definitively answer, at least on the basis of the finds recovered from eight such loci.<sup>585</sup> In aggregate, however, the evidence is sufficient to suggest the existence of some trends. The purpose of this section, which takes a synoptic view of material heretofore considered at the level of the site, is to adumbrate a vision of the Late Antique–Early Medieval hinterland of Marsala. In Chapter 6, meanwhile, I will explore some of the developments by which it was produced, and the degree to which they were (and were not) typical of Sicily as a whole.

To this end, it is useful to consider the *whole* assemblage of Roman-period pottery recovered from the area studied by MHS. As an index of activity in the project survey universe, this corpus is, to be sure, less than perfectly representative. In the first instance, it is derived from a mere eight sites, the total area of which (c. 55 Ha) constitutes less than 1% of the 112 km<sup>2</sup> designated for survey.<sup>586</sup> Furthermore, these eight sites were unevenly distributed within the area just mentioned. All eight cluster in the northern third of the survey universe. But such limitations do not excuse us from the work of generalization. Nor do they mean that our findings are an insufficient basis on which to do so, provided we keep a sense of proportionality.<sup>587</sup>

### 1. The numbers.

In aggregate, the corpus of sherds catalogued as "Roman" comprises 1702 fragments. Of these 1702 sherds, some 1336 (= c. 78% of total) can be more or less precisely dated.<sup>588</sup> They comprise 218 chronotypes,<sup>589</sup> details concerning which appear in the cumulative chronotype database file.

In keeping with the methodology employed throughout this chapter, these types' individual chronologies may be integrated to produce a (more or less) representative chronology of *all* dateable types—and thus, *arguendo*, the chronology of the assemblage as a whole (Fig. 41). In Section III.2, I discuss the ramifications of these finds from the perspective of local settlement history. Before doing so, how—

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585. If for no other reason, they are too unevenly distributed across the landscape to be considered representative of the entire project survey universe.

586. As noted above, in Section I.

587. In part, this means being cognizant of the ways in which a cumulative analysis of the sort which follows can elide important smaller-scale variation. I return to the latter subject in Section III.2.

588. Including Republican-era types dating to before the first century (cf. following note), 1349 and c. 79%.

589. In total, 221, but three of these types date to before the period of this thesis. These are:

1. A1.10300M: Amphora, Van der Werff 1 or 2 (199–1 BCE)
2. A2.0010AI: Amphora, Dressel 1 A, Italian (134–50 BCE)
3. A2.M00001: Amphora, late Greco–Italic or Dressel 1, Campanian (259–10 BCE).

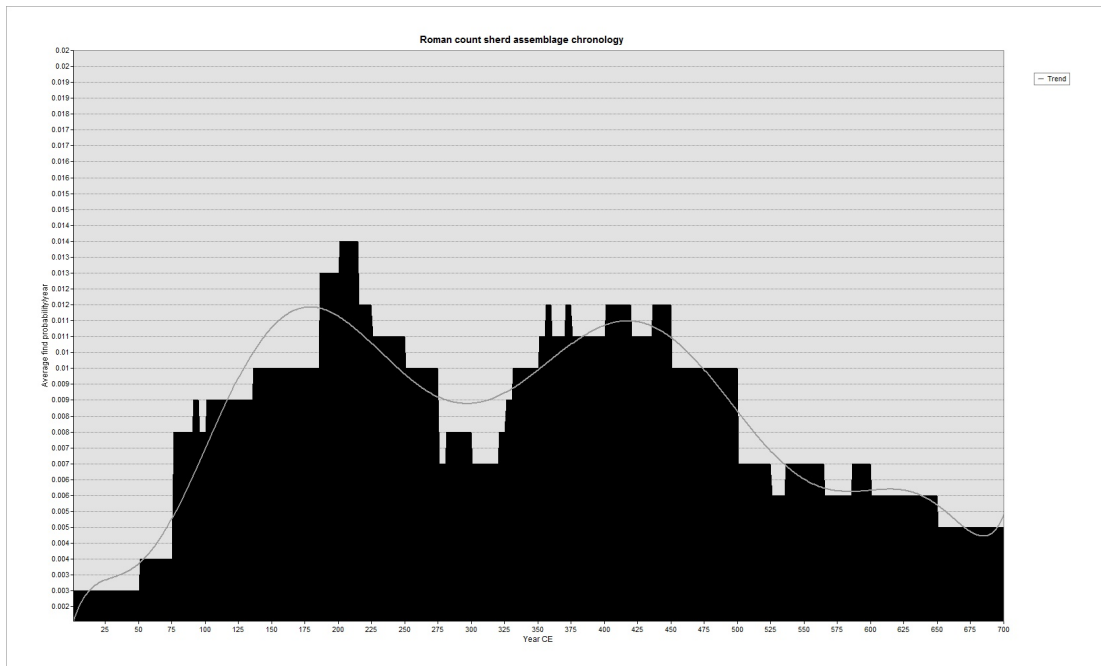


Fig. 41: Cumulative Roman tract sherd assemblage histochronology.

ever, it is worth considering the composition of the assemblage in question. The 218 chronotypes in question include a disproportionate quantity of several closely-dateable sorts of pots. As will shortly become clear, the fact of their overrepresentation is both a problem and an opportunity: the former, because it means that the catalog is less than perfectly representative in ceramological as well as geographical terms (as indicated above); and the latter, because it provides us with useful insight into a variety of economic, and more specifically commercial, trends.

#### 1.1. The composition of the assemblage: an incidental history of trade.

From a chronological perspective, the value of tightly dateable ceramics—among them ARS and North African amphorae, to name the two of the most frequent—should be clear. More to the point, so, too, should be their disproportionate frequency in the catalogue of dateable sherds. They provide more specific—and, because of their greater ease of identification, often more rapidly gotten—insight into the date of the assemblage in which they occur.

If, however, we are interested in the *composition* of that assemblage, their overrepresentation is problematic. This is because the productions in question are not merely significant for their use as fossil guides, but also, as explained in Chapter 3 of this thesis, as indices for different sorts of behavior.<sup>590</sup> As may be seen in Fig. 42,

590. Chapter 3, Section II.1.1.2.

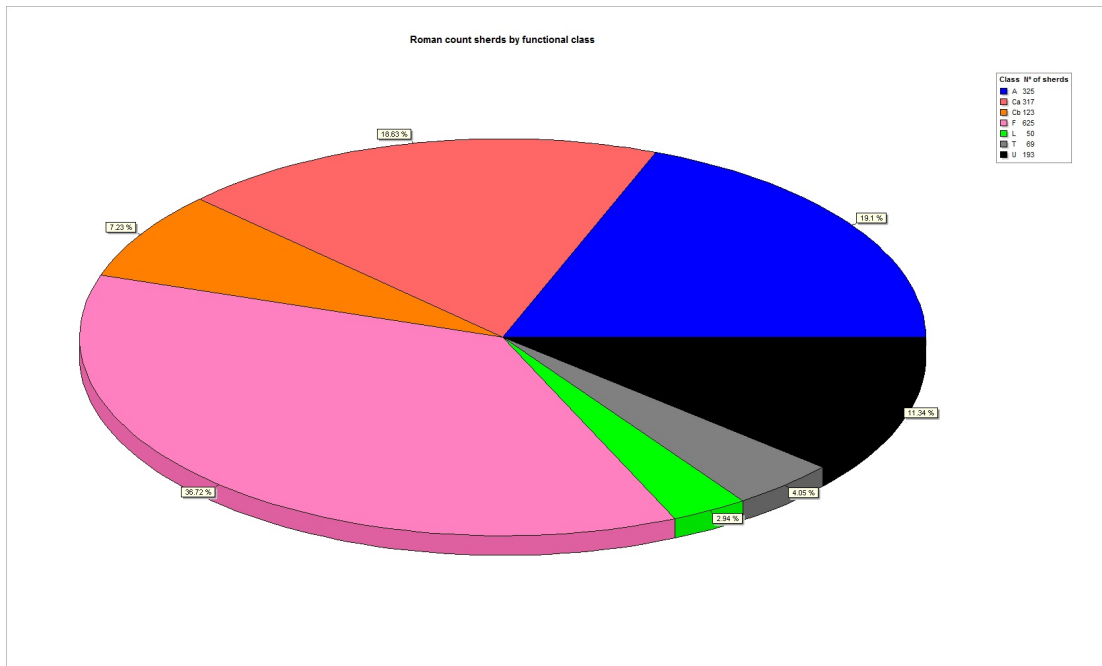


Fig. 42: Catalogued Roman sherds by functional class.

a great many of the most chronologically-useful sherds are fine wares, the majority of which were intended for use at the table. Notwithstanding the importance of dining, in both social and straightforward biological terms, it does not seem probable that more than a third (=625 sherds, c. 37% of total) of the regional population of Roman pots were meant for the table. Nor, for that matter, that a mere 4% (=69 sherds) were tile or other architectural ceramics. On the contrary, the latter should be much more numerous than the former. That they are not has a great deal more to do with authorial interest—specifically, in a maximally-dateable assemblage—than it does with any historically-plausible breakdown of pots by use.<sup>591</sup> Insofar as the latter is concerned, the corpus of sherds under discussion is apt to mislead. Among the ramifications of this fact is one which is of particular concern from the perspective of settlement history. To the degree that the relative frequencies of different functional classes shed light on the sorts of activities in a given place—or, in more traditional terms, aid us in characterizing the vocation of a site, whether as domestic, productive, etc.—they can give us only a very rough impression, here.

On the other hand, there exists a perspective whence the discussion of assemblage composition is not similarly fruitless. A disproportionate number of the chronologically-useful ceramics which, in aggregate, constitute the majority of our catalogue are also *imported* wares. Their presence in the survey zone is evidence for the region's involvement in wider patterns of exchange, and as such, they are economic as well as chronological indicators.

In specific, the catalogue includes fragments pertaining to a number of identifiable wares. Two of these—ARS and North African amphorae—have already been mentioned, but they are not the only such productions, nor even the only ones in their respective classes. In total, four functional classes are represented. The fine

591. Also influential, in this regard, is the fact that I still do not have final tile counts.

wares number four, and, alongside ARS, include TSI; thin-walled ware; and PRS. In the amphora category, North African productions are joined by a variety of western—and central Mediterranean containers—most of which, as we will see, are probably early—and a more limited number from the east (which are probably late). The other two attested functional classes are cooking wares, which are represented by Internal Red-Slip Cookware (IRSC), African cookware, and Pantellerian vessels, and lamps, of which a relatively limited number were recovered.

It is not my purpose, in this section, to treat these productions individually. Rather, I am interested in what they suggest about trends in trade involving the area under study. In this regard, several points are worth making. The first of these concerns the geographical extent of the trade in question. To the degree that it is possible to identify where these wares were manufactured, they stem from places spanning the entire Mediterranean basin. In view of characteristic Mediterranean reliance on cabotage and related modes of staged maritime trade, we should be wary of assuming that Marsala and its hinterland were in *direct* contact with all these far-flung regions.<sup>592</sup> But it does not seem possible to deny their participation in a range of *prima facie* diverse circuits of exchange.

#### 1.1.1. Precursors.

That said, it is important to note that they did not participate in all of them *simultaneously*. The chronologies of the productions in question—and so, presumably, of the traffic to which they attest—are by no means all contemporary (although some do overlap). On the contrary, the succession of types suggests a corresponding process of evolution and, in certain respects, reorientation of trade. An examination of the fine ware types is, in broad strokes, paradigmatic. The earliest attested Roman table ware consists in a variety of thin-walled vessels, the majority of which, it seems, were manufactured locally.<sup>593</sup> In this respect, they constitute a late example of what was typically a pre- or early Roman phenomenon: the large-scale manufacture of fine table wares on Sicily, including the much better known Campana C.<sup>594</sup> Following the institution of Roman power, however—if not,

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592. Although it was doubtless in contact with some of them: the Roman tax spine provided for frequent shipping between North Africa, Sicily, and the Italian Peninsula. I offer some more detailed remarks regarding this phenomenon in Chapter 6, Section I.1.

593. The possibility of a Lilybetan production of thin-walled ware was mooted by Mandruzzato 2004: 174. At the time of writing, however, it was not among the places (Lipari; Morgantina; Segesta; Syracuse: Denaro 2004) where manufacture had been attested. More evidence has since emerged in support of the notion. It is circumstantial, but nevertheless compelling. A great many vessels recovered during the recent Scuola Pascoli excavations within Marsala are characterized by a fine-grained; well-levigated; and usually very hard-fired brick-red clay, the exterior and often the interior surfaces of which are a dark matte grey. With respect to the fabric, two sorts of inclusions predominate. The most frequent are minuscule calcareous inclusions, some of which have ruptured during firing. The second most common are microscopic flakes of what appears to be golden mica. *Mutatis mutandis*—the larger shapes are frequently a great deal coarser—the preceding is an equally apt description of the fabric employed to make a range of (often heavier) service vessels, including plates, bowls, and jugs, the local origin of which is strongly suggested by the regular appearance of wasters. Given the "family resemblance", it is likely that the thin-walled vessels were also a local product: pers. comm., Nicoletta Alberti, October 2011.

594. Campana C: Chapter 3, Section III.1.1.2.a, with n. 319.

obviously, as an immediate consequence of it; Sicily's incorporation into the empire predates the production of both wares by nearly a century—the significance of native production seems to have dwindled, ultimately to the point of its disappearance.

At the same time, as indicated by the appearance of fragments of TSI, the market for imported wares was growing: specifically, from the Italian Peninsular home of the island's Roman masters. The suggestion—of a relatively tighter integration with the imperial heartland—is borne out by the evidence provided by some of the other wares I have noted. One of these is represented by a single fragment which, owing to its irregular collection, could not be included in the catalogue. This is a sherd of IRSC, the most significant (albeit not the only) production of which has been located in central Italy.<sup>595</sup> Although the beginning of its manufacture (viz., in the second half of the third century BCE) much predates that of TSI, its appearance in Sicily occurred at more or less the same time: both types were first imported in the first century BCE. The amphorae are less clear-cut, but here, too, there is evidence for some basically-contemporary developments.

The most compelling are several sherds which can be specifically identified, among them the 3 fragments of Dressel 2–4 and the one from what is either a Lamboglia 2 or a Dressel 6 A.<sup>596</sup> Both are containers which began production in Italy around the middle of the first century BCE.<sup>597</sup> Other sherds, meanwhile, cannot be identified save for in respect of their provenience. The so-called "Black Sand" fabric represented by 20<sup>598</sup> sherds is characteristic of a series of amphorae produced in the area of the bay of Naples. Notwithstanding the longevity of this industry—the latest "Black Sand" containers date to the end of the third century CE—its apogee can be situated in approximately the same period as TSI and IRSC.<sup>599</sup>

A similar chronology, finally, also applies to the seven fragments characterized as either Gallic or Iberian products.<sup>600</sup> The lengthy chronologies pertaining to these industries belie the real history of their commercialization, the apex of which can be dated to the end of the first century BCE—first century CE.<sup>601</sup> Their chronology aside, the economic significance of these remains is obviously different. Rather than attesting to trade with the center of the empire, they suggest the existence of links with other parts of its periphery.

### 1.1.2. The African connection.

During the first–second centuries CE, the panorama changes considerably. TSI and IRSC—which, respectively, constitute the preeminent imported Republican–

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595. Peacock 1977a; Peña 1990.

596. The two forms are easy to confuse, owing to their formal– as well as petrological similarities: see "Lamboglia 2" in Southampton 2014b.

597. Both are products of the Adriatic coast. Lamboglia 2 containers have been dated to the last two-thirds of the first century BCE, while Dressel 6 A was made from the late first century BCE–mid first century CE: both containers s.v. in Southampton 2014b.

598. At least. Other sherds of what is plausibly the same fabric appeared in unsorted cassettes from Casa Abbadessa, San Leonardo, and Timpone Granatello.

599. Details, see p. 98 with n. 446 and n. 447.

600. Five of which can be identified as Gallic products, but not further characterized. The remaining two cannot be identified conclusively as Gallic or Iberian amphorae, owing to their poor preservation.

601. Details, see p. 98 (with attendant notes).

Augustan table- and cooking wares—essentially vanish from the assemblage.<sup>602</sup> Far from attesting to a resurgence of native production, however, their disappearance seems to be linked to the arrival of analogous products from the area of modern Tunisia. By the beginning of the second century, if not before,<sup>603</sup> Roman African table- and cooking wares were appearing in Marsala's hinterland. Imported ARS and African cookware, however, did not merely *replace* TSI and IRSC: they vastly outnumbered them. In comparison with the products of Peninsular Italy, African ceramics were imported on a massively greater scale. ARS and especially African cookware are much more frequent, and much more widely distributed, than the wares they succeeded.

In view of their ubiquity, it is probably safe to assume that ARS and African cookware represented relatively less prestigious wares than TSI and IRSC had been.<sup>604</sup> At this juncture, however, I am less concerned with their social valence than with their use as economic indicators. In the latter capacity, these products attest to the development of a truly extraordinary commerce with North Africa. The significance of this trade is not merely a question of numbers, however. The range of products is as notable as their quantity. Alongside the table- and cooking wares just mentioned are sherds pertaining to several of the earliest Roman African amphorae, among them Tripolitanian and Hammamet types.<sup>605</sup> Still others can probably be linked to the production of ceramic lamps.<sup>606</sup>

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602. Of the 11 TSI fragments which can be more specifically identified—I include, in order to underline the point, 3 sherds collected as grabs, too—only 2 may be later than the end of the first century, and only 1 (SL3043; a base of *Consp.* form 6.3 or 6.11) is definitively so. The other (GE3041)—a fragment of a decorated floor—is compatible with shapes spanning the first century–third quarter of the second century. (An additional 19 fragments of TSI could *not* be more specifically identified, and so it is possible that they may belong to a later shape; but in view of the proportions given here, this seems unlikely.)

603. Present among the sherds catalogued were a handful of each type which might, in principal, date to the first century. African cookware: 1 sherd of a Hayes 23 A casserole, production of which began during the Flavian period (although, as Bonifay 2004: 211 notes, it is "surtout remarqu  e dans des contextes du IIe s."), as well as another which could not be identified as conclusively identified as the A or B variant (the B type is later). A further sherd was identified as either form Hayes 181 A or B, the former of which began production toward the end of the first century: Bonifay 2004: 214. ARS: Fragments of Hayes forms 3 B (4 sherds); 4 A or B (1 sherd); 6 A or B (2 sherds); and 8 A (5 sherds), all of which began production during the last quarter of the first century. Notwithstanding the modesty of these numbers, the possibility of pre-second century importation of either ware renders Sicily unusual vis-  -vis other Mediterranean centers: cf. n. 474.

604. The social "valence" of these two wares is a question which, while certainly worth exploring, lies outside the scope of this thesis.

605. As well as a smattering of forms which are entirely previous to the period of this thesis, noteworthy among them a Van der Werff 1 or 2 (combined chronology: last two centuries BCE). Tripolitanian: 2 sherds, 1 Tripolitanian 2 (SL3069) and the other, Tripolitanian 3 (SL3109). Hammamet: 2 sherds, one pertaining to a what is probably a Hammamet 1 D (SL3070) and 1, to what is either a Hammamet 1 E or 2 A (GE3272). Details and references regarding numbered sherds, see Appendix 3.

606. Noteworthy among them, an African lamp (PI3049) which bears comparison with two forms, the earlier of which is a product of the first half of the first century, and the later, end of the second–first half of the third century: Appendix 2. The catalogue includes a number of other lamps which may also be of African manufacture, but concerning which I am less certain, largely for reasons of fabric.

During the centuries which followed, the range and quantity of such products seem only to have grown.<sup>607</sup> The ceramic register evinces both the longevity, and the continued preeminence, of the link between N. Africa and the MHS survey zone.<sup>608</sup> In fact, the predominance of North African trade is probably the context in which to understand the frequency of Pantellerian cookware, which constitutes virtually the only non-African import to be found in quantity. The island of Pantelleria, which lies some 100 km southwest of Sicily and a scant 60 km from the coast of modern Tunisia, is located midway between the island and North Africa. The arrival of its products on Sicilian shores, and more specifically in the area of Marsala, was undoubtedly facilitated by its position. A slew of Roman wrecks discovered in the waters between North Africa, Pantelleria, and Sicily attest to the significance of the trade route on which Pantelleria was privileged to lie, and their cargoes, to the movement of Pantellerian products along it.<sup>609</sup> The Scauri wreck<sup>610</sup> is exemplary, in this regard. When it foundered off the coast of Pantelleria sometime in the late fifth century, this vessel contained small quantities of North African amphorae and table wares; a group of LRA 2; and a massive cargo of Pantellerian cookwares which, it appears, the ship had just taken on.

#### 1.1.3. Byzantine links.

In comparison with the number of African and Pantellerian sherds, remains pertaining to other imported wares are extremely few. Among them, however, are several whose presence is worth noting. As of the fifth century, it appears, western Sicily could expect to receive at least a modest quantity of goods from the Byzantine heartland. The catalogue includes sherds from a PRS 3 E or F bowl (1 example) and LRA 1 and 2 amphorae (1 and 2 examples, respectively).<sup>611</sup> Their presence in the survey zone does not necessarily imply a direct link with the eastern Mediterranean regions of their manufacture: the Scauri wreck also included a limited number of LRA 2, and it was most probably coming from Carthage.<sup>612</sup> But their place of origin is not in doubt, and its distance from the site of recovery speaks to an intensification of Eastern Roman attention to Sicily. The circumstances of this burgeoning interest are explored in Chapter 6.

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607. The number of later African amphorae, as well as ARS lamps, is appreciably greater than the earlier analogues mentioned in n. 605 and n. 606. Additionally, we begin to see the appearance of identifiable forms of African common ware, notable among them various of the classes of mortar first characterized by Fulford & Peacock 1984. Including grabs, the catalogue includes 3 sherds pertaining to Carthage Class 1 B (first two-thirds of the sixth century) and 2 of Carthage Class 2 (fifth–seventh century).

608. Albeit not always the same *parts* of North Africa, as discussed in Section III.2.1.3.

609. Tusa's (2004) summary of findings, notwithstanding its age, remains a useful point of reference.

610. Sami 2005a; Sami 2005b; Sami 2006 Jun 18; Tusa 2003.

611. Regarding these numbers: the PRS possibly, and the LRAs definitely, should be viewed as minima, rather than comprehensive final tallies. My relative inexperience with these productions increases the likelihood of having missed other, less obviously diagnostic remains. On these productions, see the bibliography associated with items SL3027 (Appendix 2), GE3293 (Appendix 3), and DB3068 (Appendix 3).

612. As argued on the basis of its North African cargo: Tusa 2003.

## 2. Ceramics and settlement history.

Concurrent with the foregoing history of trade is, of course, the history of the region it involved. With regard to the latter, Fig. 41 makes two things immediately clear. First, the evidence seems to confirm the project directors in their impression<sup>613</sup> of the long-term continuity of Roman habitation. Notwithstanding that the island witnessed more than a few potentially disruptive events, especially after the fourth century,<sup>614</sup> the evidence does not seem to suggest the occurrence of any very drastic rupture. On the contrary, it speaks to a notable longevity of human habitation across the surveyed region. As of the third quarter of the first century, when activity seems to have rather rapidly intensified, and continuing at least through the end of the graph interval, the evidence for local human presence is apparently unbroken.

By the same token, it is equally apparent that this "continuity" did not entail a lack of change. In fact, the curve depicted in Fig. 41 varied significantly over time. It is separable into a variety of more-or-less discrete segments, the characteristics of which are worth summarizing. We have already mentioned the first. During the latter half of the first century, and especially during its final quarter, the number of dateable finds increases precipitously. The following 200 years constitute a period which, in relative terms, is very well attested: the first several decades of the third century especially so. Thereafter, however, the frequency of testimonia seems to diminish. This decline bottoms out in the first quarter of the fourth century, after which the trend reverses itself. Some 50–75 years later, the relative frequency of dateable finds has risen to a level comparable to that observed between the last quarter of the first–final decades of the third century. The years between the second half of the fourth–end of the fifth century comprise a second peak. Its end arrives in the first quarter of the sixth century, when the curve falls to a level comparable to that of the early fourth century. After this, however, it basically seems to stabilize. Notwithstanding a gentle, and quite gradual, decline, the slope of the curve remains pretty consistent throughout the remainder of the interval depicted.

### 2.1. Supplemental remarks on chronology: regional trends.

As a description of the phases described by Fig. 41, the foregoing paragraph is essentially complete. As a summary of the area's Roman history of settlement, however, it exhibits a number of deficiencies. Perhaps the most significant of these concerns the length of the interval under discussion. It is true, of course, that the seven centuries depicted in Fig. 41 may be comfortably situated within the period of Sicily's allegiance to Rome. Nevertheless, they do not constitute the *entirety* of Sicily's Roman period, which, as recounted previously, began some two and half centuries before the beginning of the graph interval, and endured, in the west of the island, for more than a hundred years after its end.<sup>615</sup>

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613. Discussion, Blake & Schon 2010: 61–62.

614. Blake & Schon 2010: 61–62 recall several from the fifth–ninth centuries, including, by way of example, the inauguration of Vandal raids on the island in 440. For a more complete accounting of these and other events, see my summary of the written sources in Chapter 2. For a discussion of how they have been used to explain developments elsewhere in Sicily, see Chapter 5 *passim*.

615. Viz., beginning c. 241 BCE, with the Roman conquest of Sicily, and ending in the middle of the



If this is so, why is the graph not fully inclusive? The answer is less principled than pragmatic. Primarily for reasons of typological affinity, the majority of sherds dating to what is, in politico-chronological terms, the Roman Republican period, were assigned to Carmela Cipolla, the ceramicist responsible for the analysis of nominally "Hellenistic" materials.<sup>616</sup> At the time of writing, I still do not have access to the results of that analysis, and as such, I am not in a position to incorporate them into the histochronology above.<sup>617</sup> The absence of the eighth- and ninth century materials, meanwhile, cannot simply be explained by reference to project practices. Rather, it is the result of typological difficulties. It is only recently that ceramicists have begun to recognize the productions which are characteristic of this period. More to the point, they are productions I do not *personally* know well, and so I have been reticent to include them among the chronotypes employed to characterize the chronology of this and other assemblages.<sup>618</sup>

Insofar as these limitations mean that we cannot treat the corpus of *all* Roman sherds in a consistent fashion, their significance should not be minimized. But neither do they bar us from supplementing, if sometimes impressionistically, the picture derived from Fig. 41. This is especially true for the earliest phase of Roman government, a consideration of which appears in the publication of preliminary findings.<sup>619</sup>

#### 2.1.1. Punic–Roman Republican.

As the project directors note, dateable finds are actually pretty well distributed across the area explored by MHS. Relatively modest quantities of plausibly fourth–second century BCE sherds were recovered at virtually all of the sites which furnished substantial first–seventh century assemblages.<sup>620</sup> But they were also present where such finds were relatively spartan.<sup>621</sup> Alongside a relatively modest quantity of (mostly post-fifth century) Roman sherds, Casa Abbadessa also reported a variety of Republican forms. So, too, did Timpone Granatello, where identifiable fragments of ARS were virtually absent, and Borso, where the latest narrowly-dateable finds are from the first century BCE (and probably earlier).<sup>622</sup>

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eighth century, by which time the area in question had fallen under Muslim control.

616. I am grateful to Dott.ssa Cipolla for both her ceramological expertise, which she did not hesitate to share, and her company, without which the hours I spent working in the magazzino of the Museo Baglio Anselmi would have been a great deal more lonely.

617. Nor would it be easy to do so; the project directors did not impose a consistent analytical framework on ceramicists dealing with various find subsets, and inasmuch as I know that Carmela did not employ the chronotype classification system used in this thesis, her results could not be seamlessly integrated.

618. Cf. the frequency of e.g. ARS, where, as already explained, the opposite dynamic is at work. Needless to say, an informed consideration of post-seventh century wares is a desideratum; see Chapter 6, Section V.2.

619. Blake & Schon 2010: 55–58.

620. Viz., at Ditta Barbagallo, Genna, and San Leonardo—but not, it seems, at PI, which I discuss below.

621. And where, in consequence, they generally constitute a *more* significant part of their respective assemblages. MA is an exception, in this regard. Discussion, see below.

622. With the exception of two fragments of African cookware; but their chronology is so wide (76–500), and their number so small, as to diminish their value as an index of activity in loco. The single fragment of a Dressel 2-4 amphora *might* pertain to a first century container—the form's heyday ended shortly

It is worth noting, at this juncture, the possibility that not all of these sherds may actually be "Roman", in the politico-chronological terms employed above. As described by Blake and Schon, local conditions are such that it frequently difficult to distinguish between fourth- and third century BCE ceramics.<sup>623</sup> (Moreover, most of the sites at which such finds were documented *also* reported some quantity of identifiable Punic amphora fragments.) As such, they may actually be related to a process of rural "infilling", which MHS research suggests began locally during the fourth century BCE. During this period, it seems, the number of inhabited rural nuclei increased substantially.<sup>624</sup> For our purposes, however, the distinction is not a terribly important one. As we will see, in the following chapter, the continued use of pre-Roman sites during the third-second century BCE is a phenomenon which has been observed elsewhere in western Sicily.<sup>625</sup> The distribution and composition of the assemblages in question—which also contained a limited number of probably, if not certainly, second century BCE sherds—suggests that a similar sort of continuity was frequent in the region explored by MHS. More to the point, however, it suggests that the sites to which they pertained were still pretty modest. If indeed they are representative, the inauguration of Roman government does not seem to have radically altered the late Punic paradigm. In general, the countryside was extensively, but probably rather thinly, inhabited.

#### 2.1.2. Early-mid Imperial.

Strictly speaking, of course, such developments predate the period with which we are concerned. But the impression of continuity—which, it is worth noting, also emerges from an examination of the textual sources<sup>626</sup>—counsels their consideration, especially insofar as they represent a context in which later events may be understood. Concretely, they provide an alternative interpretation for the developments which appear to have occurred during the first-second centuries. Per Fig. 41, the early first century was a period of extremely limited rural activity, and the late first-second, a phase during which it appears to have massively intensified. But if, as just suggested, the first of these impressions is wrong (or least overstated), then we might reasonably suspect that the change did not simply reflect an increase in rural settlement.

In point of fact, there is at least one sense in which it might more accurately be characterized as a *decrease*. A comparison of finds from each of the eight areas surveyed by MHS attests to the abandonment of areas which were previously sites of human activity. So much, in any event, may be presumed at Borso, where it is difficult to demonstrate even first century BCE activity, and at Casa Abbadessa and Timpone Granatello, where the rarification of finds is probably dateable to the change in era. A number of other inhabited places, however, seem to have witnessed

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thereafter; see n. 419—but this seems unlikely, given the other finds recovered at Borso.

623. Blake & Schon 2010: 56. As the authors explain, problem is largely one of preservation.

624. Per the results of the MHS pilot season in 2008 (Blake & Schon 2010: 56-57). The phenomenon has been attested elsewhere in western Sicily as well: see Spanò Giammellaro, Spatafora & van Dommelen 2008 for a summary.

625. As for example at Contrada Mirabile, the very first of the five surveys treated in Chapter 5.

626. Where, however, it has historically been overstated, for reasons I consider in Ch. 2, Section II.2.2.3.

a concurrent *intensification* of activity. Such, for example, was clearly the case at Genna, where the Roman-period assemblage came to dwarf that of the preceding period, both in geographical extent and quantity.<sup>627</sup> And it also seems to have been the case at San Leonardo, where, on the strength of the finds from 2008, Blake and Schon purported to identify a "modest farm" centered on DU 1012.<sup>628</sup>

What we have, in other words, is a process of rural *consolidation* (the reasons for which I consider in Chapter 6). *Ceteris paribus*, a larger site required commensurately more provisions. During the period of this thesis, most such staples were transported and/or stored in amphorae, which we might thus expect to also become more numerous. Moreover, larger sites were also probably more prosperous. As such, they enjoyed greater access to luxury goods—which, among other things, meant imported table wares.<sup>629</sup>

Amphorae and fine table wares, as we have already seen, constitute the two most identifiable—and, especially in the latter case, closely-dateable—classes of pottery, and an increase in their number will have had a disproportionate effect on the apparent intensity of an area's frequentation. This is not to say, of course, that Fig. 41 is wholly misleading; the first–second centuries may, indeed, have witnessed the an intensification, overall.<sup>630</sup> But it is also, in part, a result of the nature of the assemblage.

### 2.1.3. A series of exaggerated events.

There are at least two other places where the possibility of such bias—and, in consequence, a revision of the trends implied by Fig. 41—must be countenanced. The early third century spike in activity, as noted in my discussion of the chronology of activity at Ditta Barbagallo,<sup>631</sup> is at least in part an artifact of typology. The period is characterized by series of related ARS vessels, the shapes of which are not terribly distinctive. ARS 14, 16, and 18 all have relatively tight chronologies,<sup>632</sup> meaning that the influence of each such fragment is atypically great. This significance of this fact lies in the ease with which other, similarly undistinguished forms (e.g. ARS 9, 10, 27, and 31<sup>633</sup>) may be mistakenly characterized as one of the above. I have tried to avoid

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627. As shown in Blake & Schon 2010: figs. 6 and 7, respectively.

628. Blake & Schon 2010: 60.

629. It would probably be more accurate to describe these productions as *semi-luxury* goods, given their numbers. (I owe this felicitous term to Foxhall 1998). For our purposes, however, the distinction is irrelevant, insofar as both represent a more (if not necessarily the *most*) prestigious option.

630. A satisfactory answer to this question is obviously desirable, but would require more and better information concerning local historic demography than we presently have.

631. Discussion, Section II.3.4, specifically concerning the behavior of the curve during the last quarter of the second century (with n. 467) and during the first half of the fifth century (with n. 466).

632. Indeed, they have essentially the same chronology. All three forms date to the end of the second–beginning of the third century. As rendered numerically for manipulation in the project GIS (186–215), this is a span of only thirty years.

633. Which, collectively, possess a chronology which is wider by nearly a century; early examples of ARS 9 are dateable to the beginning of the second century (Hawthorne 1998: 266), while ARS 27 may be as late as the second quarter of the third century (Bonifay 2004: 159). The possibility of confusion with fragments of Hayes' African cookware form 23 B—which were, through the middle of the third century, made in the same fabric, and often possessed of a similar slip—widens the range still further.

such errors, but given the extreme fragmentariness of many surface ceramics, it is likely that these forms are overrepresented.

The second such instance, meanwhile, occurs between the second half of the third–first half of the fourth century. As depicted in Fig. 41, this is a period during which rural activity appears to have pretty significantly contracted. The scarcity of testimonia pertaining to this period, however, is misleading. The interval in question pretty closely corresponds to a period (c. 230–320) during which the earliest production of ARS—the "A" fabric series, which is thought to have been produced in the north of modern Tunisia—faltered, and saw its place in Mediterranean trade subsumed by a rival ware. The production of ARS "C"<sup>634</sup>—apparently in central Tunisia, where a variety of potteries have been located—was more modest in scale, and its trade, more limited in scope. The effects of this transition were differently felt around the Mediterranean, but as Fentress<sup>635</sup> has demonstrated, most places experienced a decline in ARS supply.

The relevance of this phenomenon to MHS survey results, and more specifically the interpretation of Fig. 41, should be obvious. The curve depends on more than ARS data, but the latter have a disproportionate influence on its shape.<sup>636</sup> Fig. 43 makes this manifest. The histochronology of ARS fragments quite closely re-

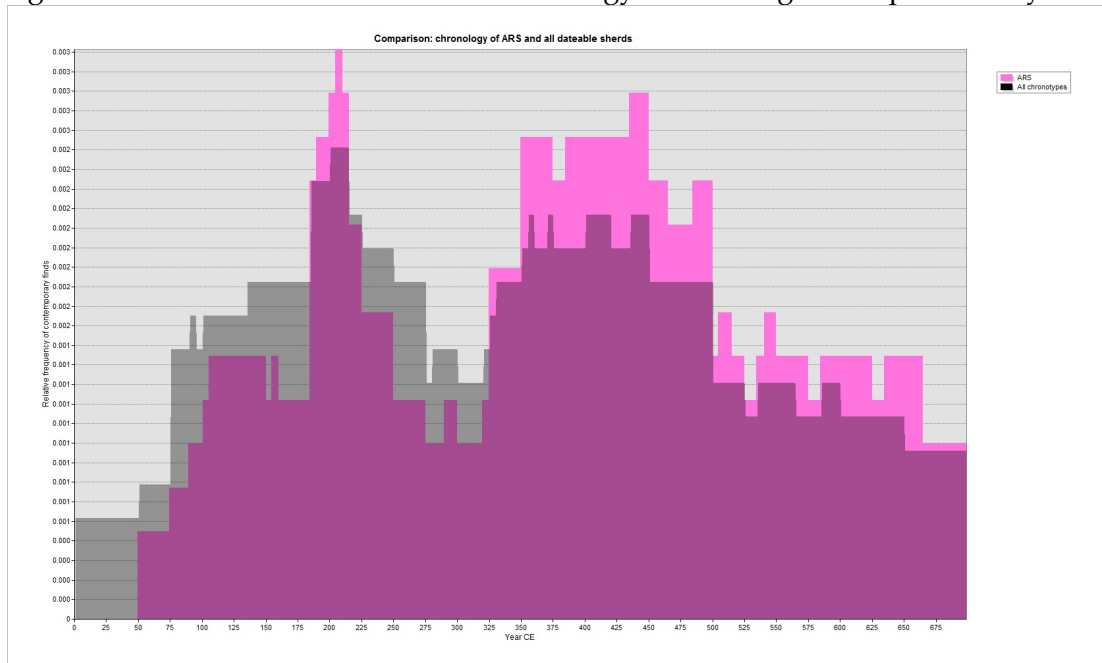


Fig. 43: Comparison of ARS and all Roman tract sherd chronologies.

sembles—which is to say, quite powerfully informs—that of the assemblage as a whole. This resemblance, in turn, suggests that the trough under discussion has as

634. On the origin of these productions, see Bonifay 2004: 45–48 and 50–51, respectively.

635. Fentress & Perkins 1988; Fentress *et al.* 2004.

636. For a number of reasons, one of which—viz., the relative specificity with which ARS forms can be dated—is a feature, rather than a bug, of the methodology I employ to assess MHS assemblage chronologies. Others, however, are more problematic. As discussed in Chapter 3, Section III.1.2.2, the decision to weight chronotype dates by sherd count increases the influence of especially friable types. And, of course, there is the bias introduced by differential recovery of different ceramic wares: a problem highlighted throughout this chapter.

much or more to do with the vagaries of ARS production and supply as it does with specifically local dynamics.

How, then, might we characterize these dynamics? If, as I have argued, the rise and fall respectively observed c. 215 and between the middle of the third–middle of the fourth century are largely chimerical, we are faced with a rather flatter curve. Between the second–fifth centuries, the relative frequency of dateable testimonia remains pretty high, and pretty stable. As we will shortly see,<sup>637</sup> developments effecting the several areas surveyed by MHS somewhat belie this apparent continuity. But at the level of the region as a whole, it is hard to resist invoking the unchanging and peaceful Sicily of Orosius and so many of our other authors, both ancient and modern.

#### 2.1.4. The sixth–seventh century and later.

As of the sixth century, on the other hand, such terms are less obviously appropriate. As recounted in Chapter 2 of this thesis,<sup>638</sup> the last two centuries depicted in Fig. 41 witnessed a resumption, and to some degree the regularization, of hostilities unseen on Sicily since the earliest phase of Roman control. In light of this history, it is interesting to note what Fig. 41 actually depicts. Relative to the levels typical of the fifth century, the region appears to have experienced a decline in the intensity of rural settlement. But the overall impression is more one of continuity than violent rupture.

Appearances, of course, can be deceiving, and there are ways in which so blithe an assessment of late Roman settlement is inadequate to describe the reality on the ground. Nevertheless, in contrast to the situation described in Section III.2.1.3, it does not appear to be *incorrect*, grosso modo. The continued appearance of dateable imported goods—especially, but not exclusively, from North Africa—speaks to the region's continued involvement in extra-Sicilian trade, as well as the means required to take advantage of that access. And if, as seems plausible, some quality of the *undated* finds also pertain to this period, Fig. 41 might actually *understate* the significance of late-period settlement.

#### 2.2. Intra-regional variation.

Broad-brush accuracy notwithstanding, the preceding summary of regional trends in rural settlement is, as stated at the outset, also very much a generalization. In the first place, this is because our data are less than "regional" in scope. All eight of the areas surveyed by MHS are located in the northernmost third of the project survey universe, and as such, should not necessarily be considered representative of developments in its south.<sup>639</sup> But it is also about the variation which is lost, or rather flattened, in the process of generalization at *any* scale. As recounted in Section II, the evolution of settlement at *each* of the eight project survey sites differs in a variety of ways from the narrative which purports to account for *all* of them. The starkest

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637. Section III.2.2.

638. Section II.1.4.

639. And not merely as a matter of principle. The southernmost third of the survey universe constitutes the immediate hinterland of the city of Marsala, which, as we have noted elsewhere, was the local focus of both political and economic activity. This is very plausibly a different social milieu.

differences concern the area of MA, which seems simply not to have been a site of significant activity during any part of the Roman period.

The remaining seven areas, meanwhile, *were* places of more or less significant Roman activity. It is simply that the evolution of that activity does not always seem to have proceeded in the same fashion. To be sure, most of the places inhabited during the period of this thesis were already active in the centuries immediately preceding Roman control. But it is also significant, I think, that not all of them were. PI, where the inauguration of significant new activity dates to the latter half of the second century, provides evidence for the continuing possibility of *new* settlement.

As it happens, PI is interesting for another reason as well. The distribution of its finds is characterized, like that of Genna or SL, by an notable degree of clustering<sup>640</sup>—specifically, in the area of DUs 2205–2207—but it also has some distinctive characteristics. Despite containing a greater quantity of the ceramics recovered on site (95% vs. 44% at Genna and 66% at SL), PI's central cluster is more modest than either of the other two sites', both in regard to its extent and the density of finds per unit area. The distribution of ceramics on site is also *simpler*, for lack of a better word. Only a very small quantity of finds were recovered outside the nucleus, and for the most part, they were arranged in a "halo" around it.

In view of the composition and distribution of this assemblage, I proposed to identify the site at PI as a farm. If so, it would represent rather a larger sort of farm than the earlier example identified at SL DU 1012. Nevertheless, the latter is a better comparandum than either of the contemporary clusters at Genna or SL. Genna, as Blake and Schon have argued, was probably a villa. Whether or not we are inclined to accept the label, there is no denying that the finds—including "tesserae, marble slabs, and even the toe of a statue"<sup>641</sup>—are richer and more diverse than those from Piscitello. The finds from San Leonardo, meanwhile, are distinguished less by their nature than their distribution, at least after the second century. As at Piscitello, the concentration at SL DUs 2010–2012 is obviously the focus of local activity. But it does not seem to have been the only such locus. Even if, as discussed above, we choose to interpret the secondary cluster in DUs 2004, 2005, 2007, 2015, and 2016 as the result of post-depositional displacement downslope, we cannot so easily dismiss the group of finds from DUs 2043–2046, which are located at basically the same altitude as DUs 2010–2012.<sup>642</sup> The contents of DUs 2043–2046 are probably too few to speculate on the nature of the "site" to which they correspond, but for the purpose of this discussion, its vocation is less important than its presence. In association with the nucleus at DUs 2010–2012, it speaks to an intra-areal articulation of activity which, to all appearances, was absent from Piscitello.

In other words, Piscitello seems to have begun, and as importantly *persisted*, as a more modest sort of site. In so doing, it complicates our notion of the local settlement hierarchy. In principle, a comprehensive concentration of rural settlement

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640. I.e., the tendency of finds recovered at a given site to be concentrated in one (or more) places therein, rather than evenly dispersed throughout the area of the site.

641. Blake & Schon 2010: 60.

642. N.b. furthermore that the distance between DUs 2010–2012 and 2043–2046 is occupied by vine rows which are oriented E–W—that is, *perpendicular*, and thus inapt to serve as channels along which objects might be moved by a plow.

should have produced a limited number of first-order sites, the consolidation of which came at the expense of smaller places of activity. PI, however, suggests that we must countenance both first- and second-order sites.

Another sort of correction is provided by the evidence from Ditta Barbagallo. As summarized above, the regional history of settlement was largely characterized by continuity, at least after a phase of initial consolidation. The settlements at Genna, SL, and, notwithstanding its more limited extent, Piscitello appear to have continued in use until the seventh century, if not later still. At Ditta Barbagallo, however, the evidence suggests that significant activity ceased sometime during the late fifth–sixth century.

Interestingly, this is also the moment at which evidence appears for a second, if admittedly smaller, new settlement. After several centuries during which evidence for human presence is scanty, and difficult to date, Casa Abbadessa witnesses a sort of renovation. Modest quantities of closely-dateable finds—including, for the first time since the site's Republican heyday, a variety of imported table wares—attest to a fifth-century<sup>643</sup> intensification of activity on site. Moreover, the focus of this activity can be pretty specifically localized. As explained in Section II.2.3, it was probably centered on the hillock in DUs 2132 and 2139. It is impossible to say, at this stage, how exclusively the local distribution was concentrated at this point, but there is little reason to suspect that the area boasted more than one such cluster. On the contrary, the distribution of the remaining materials is most easily explained as corresponding to a "halo" of the sort identified at Piscitello, with further distortions owing to post-depositional displacement.

It does not necessarily follow, from these characteristics, that activity in the vicinity of Casa Abbadessa should *also* be ascribed to a farmstead. It may well have been; the nature and shape of the distribution are compatible with such an interpretation (by which I mean, chiefly, that they are comparable to the situation at Piscitello and San Leonardo DU 1012). But other interpretations are also possible. Notwithstanding the fact that, by the fifth century, evidence for human presence at Genna was somewhat diminished vis-à-vis its late second–third century peak, the site was still large enough to serve as a point of local reference. If so, the increasing frequentation of Casa Abbadessa may not have been autonomous phenomenon, but rather one to be understood in connection with *Genna's* needs.

Finally, it is worth noting an exception to the general pattern of late-period decline: if not, as already explained, in absolute terms, then certainly vis-à-vis the second–third century peak experienced by most sites. Like Genna and Piscitello, the chronology of activity in the vicinity of San Leonardo is apparently bimodal, with a first peak occurring between the late second–early third century and a second, during the fifth. (The fact that the trough separating these two peaks is in some measure chimerical, and the impression of discontinuity between, consequently exaggerated, is not germane here.) At San Leonardo, however, it is the *later* peak which rises higher. The significance of this fact is difficult to parse, but at a minimum, it would

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643. With the possible exception of fragmentary ARS 67 B (CA3002; see Appendix 2), production of which begins to toward the end of the fourth century. That said, its manufacture seems to have continued until the middle of the fifth century, so it is best not to make too much of this.



seem to suggest one of two things. If, as seems probable, the downturn observed concurrently at Genna, PI, and SL was driven by the same suite of factors, either their consequences were further-reaching in the first two areas, or some countervailing trends were active in the third. I return to this difference in Chapter 6.

### 3.The geography of settlement.

At present, however, I mean to address another aspect of the foregoing discussion of regional settlement patterning and –development. The phenomena described above played out in a specific geographical space, the significance of which merits more explicit consideration than it has heretofore received.<sup>644</sup> In the first instance, this means a more specific emplacement of the dynamics we have already observed to occur, and in the second, an interrogation of the ways in which an awareness of the geographical context can contribute to our understanding of why they played out the way that they did.

#### 3.1. Proximity to the coast.

As it happens, the project of which this research is a part may fairly be said to have been inspired by just this sort of question. As we have already noted, San Leonardo, Borso, and Marcanzotta were selected for survey with an eye to their respective distance from the coast.<sup>645</sup> During the period of the directors' primary interest—that is, during the heyday of Punic activity in the region<sup>646</sup>—the coast, and more specifically the shores opposite Mozia, constituted a natural point of entry for goods from the wider Mediterranean world. The extent of their penetration further inland, however, was a question which the project leadership wished to explore, and they chose three sites which allowed them to do so.

The period with which *this* thesis is concerned, of course, much postdates the one for which their question was formulated. Moreover, it was characterized by some radically different dynamics, one of which is particularly relevant to the present discussion. The early fourth century BCE sack of the Phoenicians' island settlement, and the ascendancy of Lilybaeum on the mainland, suggest that proximity to Mozia—with which the survey areas of San Leonardo, Borso, and Marcanzotta were deliberately aligned—need no longer have meant very much.

It does not necessarily follow, however, that proximity to the *coast* was similarly irrelevant. The continued involvement of Sicily in Mediterranean trade meant that, at least in theory, the coast would continue to be an interface between maritime– and insular networks of exchange. We might therefore expect this trade to act as a spur to Roman-period activity, and in the longer term, settlement, near the coast; and, conversely, that such activity would diminish in function of distance therefrom. In order to test the validity of this thesis, the ArcGIS Path Distance tool was employed to calculate the shortest surface distance between the coastline and each of the eight surveyed areas. Notwithstanding the rough-and-ready character of

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644. Viz., at the level of the region; the nature and significance of individual site geographies are treated in the sections relating to the areas of their discovery.

645. Discussion, see Section II.1.2.

646. See Chapter 1, Section II.2.

such a test,<sup>647</sup> this is, grosso modo, the pattern we observe (Table 13, Appendix 1). When the project survey universe is bisected longitudinally, half of the surveyed sites (San Leonardo, Piscitello, Borso, and Ditta Barbagallo<sup>648</sup>) lie in the western half, nearer the coast, and the remaining four (Timpone Granatello, Casa Abbadessa, Genna, and Marcanzotta), in the more distant east. In aggregate, the first four sites provide stronger evidence for Roman-period activity. The two closest sites to the coast (San Leonardo and Piscitello) are the first- and third most productive areas, in terms of dateable Roman finds. And the fourth most productive, Ditta Barbagallo, is also relatively near (3.8 km).

Against this evidence, however, must be set a substantial exception. Genna, which is the second-most distant site from the coast (7.6 km), nevertheless vies with San Leonardo as the most productive Roman site.<sup>649</sup> In and of itself, this is inadequate reason to dismiss the possibility of a relationship between proximity to the coast and intensity of Roman-period activity. But it *does* suggest that the picture is more complicated than can be explained with sole reference to this facet of the region's geography. As I mean to argue later on, Genna's prominence is owed to the influence of other factors.<sup>650</sup>

Moreover, there is evidence that the significance of *this* variable may have varied over time. As of the late fifth–sixth century, we have seen, Genna was no longer the only inland survey area to be occupied. Casa Abbadessa and, perhaps, Timpone Granatello also show evidence of activity.<sup>651</sup> At the same time, activity at Ditta Barbagallo, which lies nearer to the shore, seems largely to cease. Lest I seem to

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647. Two weaknesses of which are worth noting. In the first instance, distance to the "coast" was calculated as the distance from the centroid of each survey area to a more or less arbitrarily designated *section* of the shore—specifically, from just south of Marsala to the latitude of Trapani—along which all points are treated as equally likely destinations. If indeed the coast was a site of exchange, however, it most probably occurred at specific *places* thereon, the location of which we do not know. Second, notwithstanding the utility of the tool employed to calculate shortest surface distance, it produces what is still essentially an abstraction. Other considerations doubtless influenced travellers' notions of what path to use, among them questions of land cover; availability of roads; and a multiplicity of social factors, which may be difficult or impossible to recover. On the desirability of more sophisticated analyses of overland movement, and their use in reconstructing the habitation of a landscape, see Chapter 6, Section V.3.

648. Here listed in order of increasing distance from the coast.

649. Viz., in absolute terms: 569 vs. 588 catalogued sherds. Such a comparison, however, understates the magnitude of the finds at Genna, which are far and away the most numerous per unit area. The 569 sherds recovered at Genna were spread over an area of only 3.5 Ha, for a density of 162.57 sherds/Ha, while the 588 sherds from San Leonardo were recovered from an area of 17.30 Ha, for a density of 33.99 sherds/Ha. These figures are not precisely comparable, given that the 3.5 Ha covered at Genna includes a Grid Collection Area in which project participants were tasked with *total* recovery, rather than the 10% coverage typical of MHS Discovery Units, but the discrepancy cannot simply be the result of diverse methods of collection. If, for the sake of argument, we treat the GCA as a single (large) unit, the 32 GCUs walked amount to a little less than a third of the total area (100 m<sup>2</sup>). This is substantial, but not sufficient to account for another order of magnitude.

650. See for discussion Section III.3.4.

651. So too, it is worth noting, does Marcanzotta, albeit a few centuries later still. In contrast to the Roman materials, which are basically negligible, *sensu lato* Medieval finds are ubiquitous at Marcanzotta. Afore-mentioned difficulties identifying eighth–tenth century ceramics mean we cannot be sure when, exactly, this revitalization occurred, however.

over-emphasize these developments, I do not mean to imply that people simply *fled* the region closer to the coast: the continued vitality of SL should make us leery of such a conclusion. Nor, in more general terms, do they suggest a radical transformation of the local settlement hierarchy. The most prominent sites—which, in addition to SL, also included Genna and PI—retained their preeminence during the period under discussion, too. But their fixity belies a change in the distribution of all sites, the more modest ones included. With respect to the early- and middle-Roman periods, more people were settling further inland.

### 3.2. The role of topography.

Before getting into why this shift may have occurred, it is worth considering other features of the local landscape. Among the most obvious factors is the region's topographic relief. For each of the eight sites explored by MHS, elevation and slope measurements<sup>652</sup> were recorded within an area corresponding to the minimum rectangle bounding all Topographic Units surveyed at that site. Minimum, maximum, and average values for both of these characteristics appear in Tables 15 and 16, respectively, in Appendix 1. (Standard deviation is also provided.)

As a predictor of Roman-period activity, synchronically-speaking, elevation seems pretty weak. The evidence for a correlation is not precisely *absent*, but it is relatively inconsistent: more so, in fact, than in the case of distance from the coast. The first- and third most productive sites—San Leonardo and Piscitello, respectively—are also the first- and third lowest.<sup>653</sup> But the sites at Genna and Ditta Barbagallo, which constitute the second- and fourth most productive sites, are among the highest.<sup>654</sup> And, conversely, two of the lowest—Borso and Marcanzotta<sup>655</sup>—seem hardly to have been occupied, at least during the period of interest to this thesis.

Viewed diachronically, these data make a little more sense. As in the case considered in Section III.3.1, it is possible to adumbrate a (partial, and by no means hegemonic) trend. To judge by the numbers, the renovation of activity at Casa Abbadessa and Timpone Granatello, and the coetaneous cessation of the same at Ditta Barbagallo, reflect a shift to higher places. Insofar, however, as they *also* represent a shift inland, per the results just mentioned, it is difficult to assess the significance of *elevation*, per se. As described elsewhere in this thesis,<sup>656</sup> the hinterland of Marsala is a landscape in which, grosso modo, altitude increases with distance from the coast. (In the uppermost third of the project survey universe, where all our sites are located, Marcanzotta is the only exception to this rule.) Under the

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652. As calculated on the basis of the project DEM (see Chapter 3, n. 91). As a proxy for "topography", the consideration of these two characteristics is obviously less than comprehensive. Among other things, it fails to account for aspect. But the centrality of these two attributes is such that they are nevertheless a useful shorthand.

653. Both in respect of their maximum (SL: 16 m asl; PI: 47 m asl) and average (SL: 7.6 m asl; PI: 42.7 m asl) elevation.

654. Genna: max. elevation, 142 m asl; average, 130.2 m asl. Ditta Barbagallo: maximum, 106 m asl; average, 102.4 m asl.

655. Borso: max. elevation, 44 m asl; average, 34.6 m asl. Marcanzotta: max. elevation, 56 m asl; average, 48.4 m asl.

656. Chapter 1, Section II.1.

circumstances, it is difficult to gauge the degree of influence exercised by the former characteristic *independent* of the latter.

Where slope is concerned, meanwhile, we need not fear a similar sort of entanglement.<sup>657</sup> Accurately assessing its influence, however, is not much less fraught. *Prima facie*, there are more and better indications of a relationship between site chronology and –gradient. Three of the four best-attested Roman sites (Ditta Barbagallo, Piscitello, and San Leonardo) are characterized by relatively low maximum and average slopes. And if we focus on the latter measure, the fourth, Genna, is, too.<sup>658</sup>)

The *significance* of this relationship, however, is less clear. First of all, it is very probably overdetermined, in no small part as a result of project methodology. Practically speaking, the difficulty of systematic (and maybe especially *intensive* systematic) archaeological survey increases with steepness of slope. It is clear, in view of the areas designated for survey, that the project leaders had this fact in mind. Four of the eight sites (Borso, Marcanzotta, Piscitello, and San Leonardo) explored by MHS are not simply flat; they are surrounded by open, and similarly flat, terrain. The others, meanwhile, are located near the edge of a plateau. But in no case does the area actually subjected to collection extend beyond the margins of that plateau.

Quite apart from such concerns, however—and presuming, *arguendo*, that they do not constitute too great a source of bias!—are questions of interpretation. As we have already noted, gentle slopes appear to be positively correlated with greater intensity of Roman activity, *grosso modo*. In one sense, this is an unsurprising, even banal, result. It is easy to build in flat landscapes, and buildings tend to encourage more permanent occupation. The occurrence of settlement in places of low average slope is less a feature of habitation in this region, I think, than of settlement tout court.

Interestingly, however, the correlation is stronger when we consider *maximum*, as opposed to average, slope. Aside from at San Leonardo, where the highest recorded slope (8.4°) occurs on an incline facing northwest from the center of DU 1006, the highest measures of maximum slope were recorded at the inland plateau sites mentioned above. More specifically, they are located near enough to its *edge* that the minimum bounding rectangle includes a part of the slope falling away

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657. Notwithstanding the fact that the eastern—which is to say, furthest inland—part of the Survey Universe is characterized by increasingly frequent plateaux and escarpments, and that such features are even more common beyond the bounds of the area in which MHS was permitted to work. Their appearance is relatively abrupt, and as such, does not point to any very straightforward relationship between slope and distance inland.

658. *Viz.*, as an absolute measure (3.4°) if not necessarily by rank-order. Genna's average slope is the highest of the surveyed areas, but this fact is almost entirely explicable by its proximity to a plateau edge. (Moreover, it goes to demonstrate how little variation there is, in regard of the regional topography; the difference between the highest and the lowest calculated average slope (1.0°, at Ditta Barbagallo) is a scant 2.4°.

from the plateau, proper.<sup>659</sup> By virtue of their location, in other words, these sites enjoyed a commanding view of the country spread out below.<sup>660</sup>

To all appearances, however, this advantage does not seem to have been decisive, at least during the Roman period. At the regional level, as we have already observed, there seems to have been a preference for sites in the open. At the level of the *site*, an analogous phenomenon seems to exist. Of the sites located on the plateau, only one, Genna, is characterized by a preponderance of Roman materials near its edge.<sup>661</sup> In the remaining three cases, the evidence for activity during this period is not similarly concentrated. Casa Abbadessa and Ditta Barbagallo, as we have seen, are both characterized by a distribution with an identifiable center, but it is located at a somewhat greater remove from the edge. At the latter site, the distribution of Roman materials was centered on, if not actually to the east, of Sig. Barbagallo's house which lies approximately 140 m from the lip. At the former, it was centered on the prominence at DUs 2139–2142, which rises some 250 m to the south of the plateau's edge. Timpone Granatello, in contrast, is characterized by a much less concentrated distribution of finds. And to the degree that a center *can* be discerned, it seems to lie in the central third of the surveyed area, latitudinally speaking.<sup>662</sup> The most productive DU, 2112, lies c. 100 m distant from the edge to its east, and less than 200 m from the edge to the north.

### 3.3. Hydrology.

Also basic to the character of the local landscape is the region's hydrology, some aspects of which we have already considered. In Section III.3.1 we discussed the complicated, and quite probably changeable, influence exercised by the coast on local patterns of settlement. Notwithstanding its significance, however, the Mediterranean—or, more accurately, a sheltered part thereof; at the latitude of the survey universe, it is largely the Stagnone, rather than the open sea, which lies beyond the shore—is not the only water-feature located in the area under discussion. There are also two rivers, one of which flows through the area explored by MHS.<sup>663</sup> The Birgi River flows generally northwest through the northeastern corner of the survey universe, after which it turns west to debouche near the northern end of the Stagnone. The area of its mouth was more or less that surveyed by Del Puglia in 2004–2005.<sup>664</sup>

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659. With the exception of Ditta Barbagallo, where the surveyed area does not extend far enough westward to arrive at the edge of the plateau on which the site is located. (This is doubtless the reason why the average– and maximum slope at Ditta Barbagallo is so low, vis-à-vis other areas.) On the minimum bounding rectangle, see n. 412.

660. If not a defensive advantage/defensible topography per se; whatever the significance of the variation discussed here, the fact of the matter is that none of the slopes at issue are sufficiently steep as to have provided an impassable barrier to advancement onto the summit of the plateau.

661. Details, see Section II.4.3. This concentration was noted in Blake & Schon 2010: 60–61.

662. Section II.8.3.

663. The Sossio River, which debouches into the Mediterranean near Onte, south of Marsala, follows a meandering course westward from its source north of Ciavolo across the southern third of the Survey Universe. As no survey was done in this area, however, it is of limited relevance to discussion of project activity.

664. Del Puglia 2005

On the strength of his findings, Del Puglia has argued that the Birgi River constituted a magnet for agricultural activity and a (secondary<sup>665</sup>) locus of settlement. His assessment of its appeal—namely, that the river represented the most reliable source of potable water—is self-evidently reasonable, but his conclusions are worth unpacking. Del Puglia's results describe a landscape which is richer in Punic through late Republican evidence than in materials pertaining to the period of interest to this thesis. This imbalance is as notable in the vicinity of the river as it is in coastal plains which he also describes. The possibility of a different disposition of later settlement is implicit in his argument. More to the point, it is explicit, or at least strongly suggested, in MHS survey results. Borso and Marcanzotta, which constitute, respectively, the first- and second-closest survey areas to the river,<sup>666</sup> also proved to be least productive of Roman finds. Our data are incomplete, to be sure; but they do not seem to suggest that Roman-period activity was positively correlated with proximity to the river.

That said, it worth being clear: they are also insufficient to argue for the reverse. The fact that Borso is *relatively* the closest area to the river does not mean that it is *objectively* very close. Del Puglia is vague concerning the distance between the sites he identifies at Ragattisi and Porco Spino and the old riverbeds located near them, but his language suggests something less than the c. 1 km which separates Borso from the Birgi.<sup>667</sup> More generally, we have little insight into what Roman-period occupants might have considered an *optimal* distance. Implicit in Del Puglia's observation that we do not know whether the Birgi was navigable in antiquity is a measure of uncertainty concerning the contemporary depth of the river. The latter measurement is relevant to determining the likelihood and seriousness of flooding, the possibility of which would have discouraged too-proximate settlement.

All these concerns, however, are in at least one respect irrelevant. This is because, as the data clearly show, it was perfectly possible for significant settlements to be located far from *any* river course, at least insofar as we know them. The sites at Piscitello especially Ditta Barbagallo are exemplary in this respect, and there is little reason to think that they were atypical. Roman agricultural practices—which, among other things, countenanced the use of cisterns and systems of irrigation<sup>668</sup>—were perfectly capable of coping with limited water. Proximity to a river was undoubtedly a desideratum, but it cannot have been a *sine qua non*.

### 3.4. Viabilità.

Finally, it is worth considering an aspect of the anthropogenic landscape. Roman-period settlement in the modern province of Trapani was organized with reference to the region's roads, the construction of which, in the main, actually predated the period of Roman control.<sup>669</sup> Filippi identifies two main axes which

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665. The primary being the coast itself: "Le aree di frammenti fittili rinvenute durante la ricognizione appaiono maggiormente concentrate lungo la fascia costiera": Del Puglia 2005: 155.

666. Borso is located c. 1 km south of the Birgi at its nearest point, and Marcanzotta, c. 1.25 km NE of it.

667. The finds from Ragattisi are located "a brevissima distanza", and those at Porco Spino "ai margini", of the riverbed in question: Del Puglia 2005: 158.

668. The classic treatment is White 1970.

669. Uggeri's (2004: Fig. 3) reconstruction of the island's pre-Roman road system is notable, above all, for

served both as venues for transportation and magnets for settlement. The first of these ran between Segesta and Lilybaeum, and the second, between Segesta and Roman Drepanum (modern Trapani), "oltre...alcuni percorsi secondari che s'inseriscono fra queste direttrici principali".<sup>670</sup>

Needless to say, the validity of this thesis requires that Filippi have a reasonably clear idea of the path those roads followed; otherwise, it would make little sense to speak of regional settlement being located along them. Filippi's



position on the matter is maximally conservative, in that he assumes that the roads linking Roman Lilybaeum, Drepanum, and Segesta were for all intents and purposes identical to the *regie trazzere* of the Medieval and early Modern periods.<sup>671</sup> (And, it is worth noting, also frequently identical to the *modern* road system, segments of which follow the route of the *regie trazzere*, grosso modo.) More specifically, he reconstructs them as depicted in Fig. 44.

Fig. 44: Roman roads. Adapted from Maurici 2005:Fig. III,7. For the purposes of our analysis, this notion is not without its problems. Generally speaking, there is the issue of scale. The *regie trazzere* constituted a web of arteries which often lay one quite distant to another. At the scale of the province, it is relatively easy to discern whether there might have existed a consistent relationship between these paths and

the strength of its resemblance to that of later phases of the island's history, in general and often in particular. The thesis, quite apart from its specific merits (which I do not here have the scope to consider), is in principle compelling. As indicated below, the evidence suggests that a notable measure of conservatism characterized the island's road system in its later phases, too.

670. Filippi 2002a: 383.

671. The name—"Regie trazzere"—dates to the nineteenth century, but the network of roads to which it refers is a great deal older. The *trazzere* (from the Latin "tractus"; the word is first attested in documents of the fifteenth century, but likely dates to the period of Norman rule) were public roads maintained, in the first instance, for purposes of facilitating transhumance by the island's many shepherds. Nevertheless, they quickly found wider use as the predominant avenues of movement in the countryside and between places of denser habitation: Santagati 2006: 11–13. The notion that this development represented a return to an original, Roman-era function—and, as Filippi suggests, that the routes themselves were in great measure identical—has long been an article of faith amongst Italian scholars. Witness Paolo Orsi (1907: 750, n.1), one of the giants of Sicilian archaeology, more than a century ago: "chi ponesse mano allo studio della viabilità della Sicilia antica...arriverebbe alla singolare conclusione che quasi tutte le vecchie trazzere non erano in ultima analisi che le pessime grandi strade dell'antichità greca e romana, e talune forse rimontano ancora più addietro".



sites they connected. At very much smaller scales, the influence is not necessarily so clear. More than half of the MHS survey universe lies in the area located *between* two regie trazzere, one running N–S between Trapani and Marsala, and the other, E–W between Marsala and Segesta. More to the point, the *entirety* of the area actually surveyed, and all of the sites identified within it, does, too. Under the circumstances, we cannot appeal to the regie trazzere to explain all of the patterning that we see. Were we better informed concerning the "percorsi secondari" to which Filippi alludes, it might be possible to go further, in this regard. Insofar as he is correct to characterize them as running between the regie trazzere—which is to say, through the sort of area with which we are concerned—it is possible that patterns of settlement in the surveyed area could be linked to one or more such paths. Unfortunately, however, detailed information concerning local roads is difficult to come by. Given the ubiquity of imported goods inland, it stands to reason that the local road system must have been relatively well-developed; but we cannot be certain how it was positioned vis-à-vis local settlement, or vice-versa.

If, however, Filippi's conjecture cannot account for *all* of the variation that we see,<sup>672</sup> it may suffice to explain two important aspects thereof. As reconstructed by Filippi, the regia trazzera linking Marsala with Trapani runs right alongside San Leonardo, which, in terms of the quantity and diversity of its finds, vies with Genna as the largest (if not also longest-lived) of the sites documented by the project. So clear an association cannot, unfortunately, be shown for Genna itself, which lies c. 6.8 km from the coastal road. But neither can we dismiss the possibility of such a relationship. In contrast to the coastal route between Trapani and Marsala, which, per Filippi, is largely accepted as a continuation of the Roman road,<sup>673</sup> the evolution of the regia trazzera linking Marsala with Segesta is not always so clear. In part, this is because we are less than perfectly informed concerning the Roman road which prefigured it.

Probably the greatest controversy concerns the location of two sites mentioned in the Antonine Itinerary. In order of increasing distance from Marsala, these are *Oliva* (97.5) and *Longaricum* (97.4).<sup>674</sup> Scholars' attempts to identify these two sites have produced a range of possibilities, and, depending on which thesis one accepts, several radically different trajectories for the road by which they lay. Probably the most unusual proposal is that of Uggeri, who believes that the order of these *stationes* has been reversed in the *Itinerary*, and that *Longaricum* ought actually to be the more proximate to Marsala.<sup>675</sup> The identifications he proceeds to make—*Longaricum* with the River Modione in the vicinity of Partanna, and *Oliva* with a locale near Castellaccio di Fratacchia<sup>676</sup>—make for a decidedly circuitous route. After

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672. I.a., why two sites at a similar distance from this self-same road—PI and Borso—should have had such different historical trajectories.

673. See also the reconstructions proffered by Uggeri (2004: 159) and Santagati (2010: Fig. 1). Maurici (2005: 65) is a little less sanguine, but his doubts concern the trajectory of the road north of the Birgi River, rather than in the area of greatest interest to the present discussion.

674. Or, in the oblique cases employed in the itinerary, *Ad Olivam* and *Longarico*. *Oliva* lies some 24 m.p. distant from Marsala, and *Longaricum*, a further 24 m.p. beyond that.

675. Uggeri 2004: 273ff.

676. The argument's logic is somewhat convoluted. At the distance (24 m.p.) which, per the *Ant. It.*

leaving Marsala, the road leads southeast until it reaches Castelvetro, then turns rather abruptly north toward Palermo.

Others, in contrast, envision a more straightforward route. Maurici—who, unlike Uggeri, does not assume the *Itinerary* has suffered a metathesis—places *Oliva* north of Salemi, near San Miceli, and *Longaricum*, to the south of Alcamo, which makes for a less acute change in direction.<sup>677</sup> And then there is Filippi's reconstruction, which identifies *Oliva* with Baglio della Cuddia, on the eastern slopes of Montagnola della Borranina, and *Longaricum*, with modern Alcamo.<sup>678</sup> The trajectory which emerges from these assumptions is the most direct of all, but it is not only interesting for this reason. If *Oliva* was, indeed, to be found in the vicinity of Baglio della Cuddia, then the most obvious route thither from Marsala would pass right by Genna.<sup>679</sup> It may not have been the *only* way to get there—the multiple possibilities just mooted, it is worth noting, may have corresponded to as many roads, rather than alternative routes for a single one<sup>680</sup>—but it was probably *one* of the ways.

As a characterization of regional patterns of settlement, the foregoing summary is obviously incomplete. But it is more than sufficient to demonstrate that this corner of Roman Sicily was neither homogeneous nor unchanging. On the contrary, the nature and intensity of human settlement varied across both time and space. In Chapter 5, I marshal other areal studies in order to underline this fact. In Chapter 6, I aim to explain why.

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(97.6), lies between Lilybaeum and the next stage of the itinerary *Ab Agrigento Lilybeo*, there is no obvious candidate for the *Oliva* which ought to appear. There is, however, the River Modione, which in Antiquity was known, variously, as the River Selinus or Lanaricus (cf *Ant. It.* 88.8). The similarity of the latter name to the *Longaricum* invoked at 97.4 is, for Uggeri, sufficient to suspect that perhaps this is the location that was meant—especially given that, at the distance to the *third* stage (another 24 m.p.), there appears a "Casa dell'Oliva" in the vicinity of Castellaccio di Fratacchia.

677. Maurici 2005: 67–71.

678. Filippi 1996: 58. Verbrughe (1976: 70) had previously proposed a similar solution.

679. Viz., along the road which on the IGM tile 257 IV S.E. Borgo Fazio is labelled "via vecchia di Palermo".

680. A possibility suggested, concretely, by several old maps—see e.g. Dufour 1992: 438 (Appendix 1, Fig. 53), an anonymous eighteenth century depiction of roads in the city's immediate hinterland—as well as in aggregate by their manifest differences.

## CHAPTER 5. CASE STUDIES IN REGIONAL VARIATION

## I. Introduction.

The purpose of this chapter is two-fold. As indicated in Chapter 2, it is intended to illustrate, if not the fullness, then certainly the vigor of Sicilian archaeological survey, which continues to produce results from across the island.<sup>681</sup> It is also, however, of more specific use. The five surveys considered in Section II of this chapter demonstrate the range of variation possible even within a relatively limited part of the island: to wit, the western part of Sicily. As such, they provide a background against which the results of MHS research can be understood.



Fig. 45: Surveys for comparison. Light green: Contrada Mirabile. Purple: Salemi. Green: Segesta. Blue: Monreale. Yellow: Heraclea Minoa.

As is visible in Fig. 45, these five projects are located at a range of distances from MHS. The nearest, Contrada Mirabile, was chosen on account of its proximity, which is such that the latter project's results can almost be taken as an expansion of those obtained by the project treated in this thesis. The Contrada Mirabile survey was undertaken in a region which, at least in part, overlaps with the MHS survey universe.<sup>682</sup> Perhaps unsurprisingly, its geography is also pretty similar. The same cannot be said for the next two nearest surveys, which took place in the areas of Salemi and Segesta, respectively. The former lies some 12 km east of the MHS survey universe's eastern border, while the latter is a further 6 km further inland.<sup>683</sup> In

681. A full accounting of Sicilian survey projects, while undoubtedly a desideratum, lies outside the scope of this thesis as presently constituted.

682. Which is not to say that the survey was active in the area of overlap. For details concerning the Contrada Mirabile survey zone, see Section II.1.1, below.

683. Both of these measurements (as well as that for Monreale, below) refer to the straight line distance

contrast to the landscape near Marsala, both these areas are characterized by higher elevation and more varied topography. It was this difference which counseled their consideration here, by way of contrast.

The two most distant projects, Monreale and Heraclea Minoa, were also chosen by reason of apparent similarity or difference. Monreale, which is located in the Val Belice more than 45 km east of MHS, is distinctive for being the furthest inland—and, with respect to the other areas treated below, also probably the most isolated.<sup>684</sup> Heraclea Minoa, by contrast, is located some 70 km southeast of MHS, on the island's southern coast.<sup>685</sup> In this respect (as well as in some particulars of its landscape),<sup>686</sup> Heraclea Minoa resembles the area explored by MHS, albeit on a different shore. As such, it seemed a useful way to check whether trends observed in the area of Marsala were more strongly influenced by local conditions than by the area's relative geography, or vice versa.

Needless to say, these are not the only comparanda available. Recent decades have seen the multiplication of surveys across the island, three of which were undertaken in the area I have characterized as "western Sicily" (Fig. 46). Notwithstanding its geography, one is of limited use for comparison. Del Puglia's survey of the northern shore of the Stagnone of Marsala has been too summarily published to allow for an adequately detailed analysis of its findings.<sup>687</sup> And even were it more fully documented, the degree of overlap with MHS's survey universe is such that it would not likely tell us much that is new.<sup>688</sup> Similar remarks apply to survey work done in the territory of Alcamo.<sup>689</sup> The results of this work have been more fully published, but information concerning the extent of the survey zone, project methodology, time frame, and the like is equally hard to come by. Finally, there is the survey done in the vicinity of Montagnola della Borranina.<sup>690</sup> In principle, this is potentially a more useful comparandum. The area of Montagnola della Borranina, which lies some 4.5 km east of the MHS survey universe's eastern border, was subjected to two seasons of survey between 1995–1996. The results of this work have been published in detail sufficient to render their consideration possible, and in a later phase of this research, I hope to do just that. For now, however, the project's location makes it a lower priority. It lies more or less at the same latitude as a trio of

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between the eastern edge of the MHS survey universe and the westernmost point of the survey zones claimed by the Salemi and Segesta projects respectively. Further details thereon, see Sections II.4.1. and II.5.1., respectively.

684. A fact which is not the result of distance alone. Of the surveys considered here, Monreale is likely the furthest from a major Roman artery. Contrada Mirabile and Heraclea Minoa (on which more below) are located on a southern coastal road which Uggeri (2004: 163–198) names the "Via Selinuntina". Salemi and Segesta, meanwhile, were located in close proximity to the most plausible trajectory for an inland road linking Lilybaeum with Panormus, modern Palermo: see Chapter 4, Section III.3.4.

685. As measured from from the southeastern corner of the MHS survey universe to the northwestern corner of the Heraclea Minoa survey zone.

686. See Sections II.2.1. and II.2.4.

687. Viz., in Del Puglia 2005.

688. La zona studiata, è compresa tra la Contrada Spagnola a sud e la foce del fiume Birgi a nord": Del Puglia 2005: 155. The author does not specify the survey's longitudinal extent.

689. On which see Filippi 2002a; Filippi 2002b; Orofino 2006.

690. Lauro 2003; Lauro 2005.





Fig. 46: Western surveys not treated in this chapter. Blue: Stagnone. Yellow: Montagnola della Borranina. Green: Alcamo (borders approximate).

sites strung along the northern border of MHS's study zone,<sup>691</sup> and as such, constitutes a extension of the area which is already most intensively studied.

With regard to the surveys which *are* treated in this chapter, the discussion is structured according to a formula designed to facilitate the process of comparison:

#### A. Name of surveyed region

1. **Introduction.** Including a brief history of the project under discussion; its area of operation; and the extent of the area surveyed.
2. **Methodological notes.** A description of the project's methodology, with particular emphasis on two aspects deemed especially significant from the perspective of cross-project comparison:
  - a) **Collection methodology.** A discussion of the principles, whether explicit or implicit, guiding the survey's artifact collection.
  - b) **Site characterization.** A consideration of the site types identified by the project and, insofar as is possible, the process by which they are characterized as such.
3. **Results.** A summary of the conclusions at which the project directors arrive. Particular emphasis is placed on the proposed extent and character of

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<sup>691</sup>. Discussion, see Chapter 4, Section I (with Fig. 3).

habitation; its evolution over time; and the authors' explanation of both, to the degree that it is offered.

4. **Evaluation.** A reflection on the results described above. In contrast to the previous section, which accepts *arguendo* the validity of the authors' conclusions, this discussion also considers the ways in which they may have been biased (principally by assumptions and/or practices described in "Collection methodology" and "Site characterization").

These observations provide the grist for Section III, which is explicitly concerned with the work of comparison. The discussion begins by setting side-by-side all of the narratives developed in the survey summaries appearing below. This is followed by an examination of the ways in which these narratives differ, or do not, and how. The chapter concludes by asking whether any pattern can be discerned in these narratives, and, having concluded that there is, points the way to a discussion of (some of) the factors onto which these patterns can be mapped.

## II. Project summaries.

### 1. Contrada Mirabile.

#### 1.1. Introduction.

In September of 1988, a team of archaeologists returned to the site of Timpone Rasta, located near Contrada Mirabile in the province of Trapani. Three years previous, Di Stefano had undertaken a limited excavation aimed at confirming the identification of the site—proposed by Alagna on the basis of his extensive survey of the area—as a Roman villa.<sup>692</sup> A second, and more extensive, excavation of that villa was foremost among the the projects contemplated by the scholars who had decided that Timpone Rasta would reward further study. But it was not the only such project, nor, for our purposes here, even the most important. Contemporaneous with the excavations undertaken by her colleagues, Fentress undertook a partial, but methodologically sophisticated, survey of the surrounding area.<sup>693</sup> During the single season of the project's activity, a nine-member<sup>694</sup> team made an intensive survey of several areas within the survey zone<sup>695</sup> (Fig. 47). These included three 2 x 2 km areas distributed along a SW-NE axis in the eastern part of the survey area, the total area of which (12 km<sup>2</sup>) is simple enough to calculate.<sup>696</sup> They also, however, included others

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692. Alagna's thesis was noted by Di Stefano several years before that: 1982: 359. I have been unable to find any record of the publication of Alagna's survey, however, nor of Di Stefano's 1985 excavation.

693. Which, notwithstanding the evidence of past habitation—abandoned *bagli* (see Chapter 1, Section II.1) dot the landscape, as do a plethora of stone huts once employed as guardhouses or for habitation during the harvest—is today almost totally given over to viticulture.

694. *Viz.*, Fentress, Kennet, and seven students: Fentress, Kennet & Valenti 1986 [1990]: 88, n. 1.

695. I use this term in contradistinction to "survey universe", which, as employed in my description (Chapter 3, Section II) of the region under study by MHS, should be understood to signify an *a priori* delimited area of potential activity. The areas surveyed by Fentress and her collaborators may be located within a particular *region*, as seen in Fig. 47, but it is not a region whose limits were (or, *ex post facto*, *can be*) fixed.

696. Proceeding from north to south, these three areas are located in the Mazaro River Valley; on the ridge where the excavated site is located; and straddling the edge of the "sciar(r)e", a region

which are not so easy to quantify. As Fentress explains, the 12 km<sup>2</sup> sample just mentioned "was then filled out with the sherding of previously known sites"—as

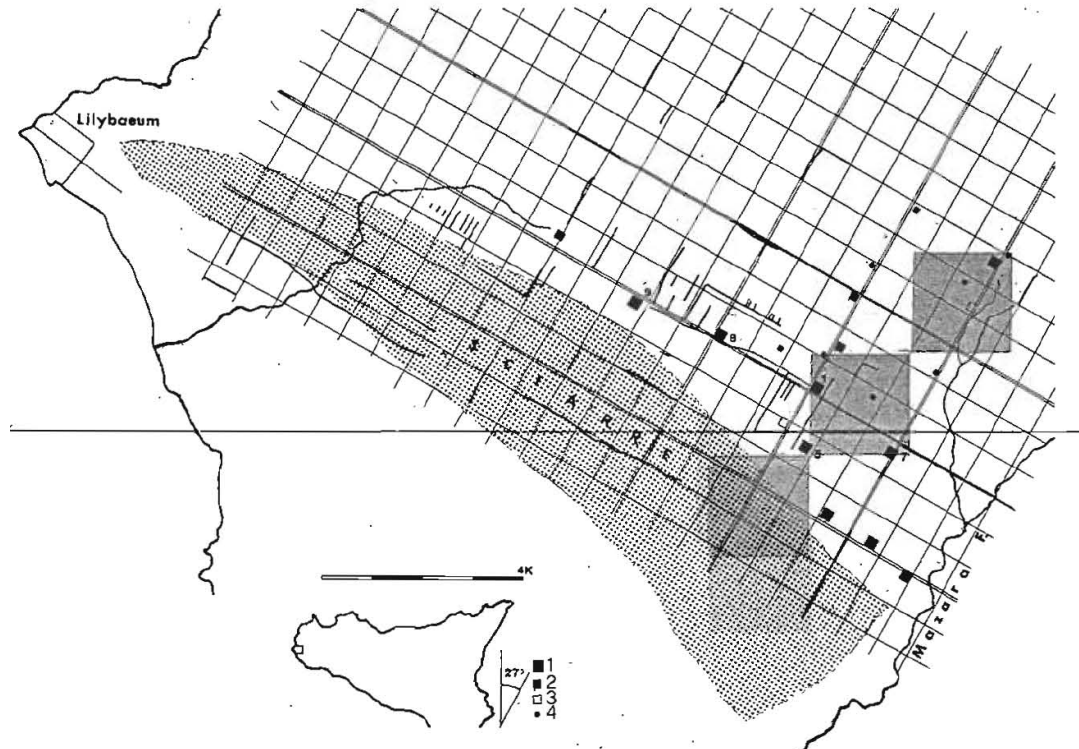


Fig. 47: Contrada Mirabile survey zone (from Fentress 1998). 1: villa. 2: large farm. 3: site with poor visibility. 4: small sherd scatter

identified, that is, during Alagna's extensive survey—"and a certain amount of purposive samples".<sup>697</sup> It is possible, since identified sites are plotted on the figure above, to intuit where at least the former areas might have been located. But it is nowhere stated how large an area was investigated during the "sherding" of these sites, nor how many "purposive samples" were actually made. Under the circumstances, it is impossible to arrive at a figure for the total land area surveyed.<sup>698</sup> And, perhaps more problematically, we cannot calculate what percentage of the "survey zone" was actually surveyed.<sup>699</sup>

## 1.2. Methodological notes.

### 1.2.1. Collection methodology.

As already mentioned, the survey of Contrada Mirabile was intensive, rather than extensive, in character. In specific terms, this meant that the areas surveyed<sup>700</sup> were subjected to systematic investigation, the particulars of which were established

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characterized by limestone outcroppings which have historically been quarried for building materials: Fentress *et al.* 1986 [1990]: 79. They are represented, in Fig. 47, by the three dark grey squares seen in the southeastern corner of the illustrated region.

<sup>697</sup>. Fentress *et al.* 1986 [1990]: 79.

<sup>698</sup>. Fentress' (1986: 79) remarks on the subject do not, unfortunately, do much to clarify the matter: "[t]he total area investigated was very small".

<sup>699</sup>. But see n 702.

<sup>700</sup>. As described in the preceding section.



a priori and thereafter applied consistently.<sup>701</sup> Groups of 4–5 field-walkers spaced at intervals of 10–20 m<sup>702</sup> noted the concentration of materials in the areas under study, and, where sites were discerned—either on the strength of Alagna's previous characterization or on the basis of criteria enumerated in below—collected all those they encountered. "Off-site" materials, meanwhile, were not collected, but their presence was recorded cartographically.

### 1.2.2. Site characterization.

Helpfully, Fentress is explicit concerning the range and characteristics of three of the site-types identified by the Contrada Mirabile survey.<sup>703</sup> These are:

1. Small farms or, alternatively, sherd scatters<sup>704</sup>
2. Large farms
3. Villas

The characterization of a given site in these terms was accomplished with reference to two criteria: area of ceramic scatter and presence or absence of "architectural elaboration".<sup>705</sup> The former criterion is basic to distinguishing between small- and large-farms, which, for the Republican period, range in size from 0.1–0.25 Ha and 0.25–0.96 Ha, respectively. The second criterion, meanwhile, is employed to distinguish between large farms and villas, since their respective sherd scatter sizes (0.25–0.96 Ha and 0.64–4.00 Ha) partially overlap. Villas present evidence of "architectural elaboration", while large farms do not.

As is probably obvious, only one of these three categories is heuristic, rather than simply operational, in character. If we accept the (implicit, but probably sound) interpretation of architectural elaboration as a proxy for wealth, then it is not unreasonable to suggest that its discovery on a given site be understood as a corollary of elite presence. Small and large farms, meanwhile, are characterized on the basis of a criterion which, though adequate to establish an elevated probability of significant human activity at each site so designated, is inadequate to ascertain what that activity might have been. The assumption implicit in Fentress' terminology—namely, that they constituted loci of stable human habitation—is a sensible one, but constitutes only one of a range of possibilities. Indeed, three others are mooted in Fentress' discussion of the four sites which are attested for the Late Antique period of interest to this thesis.<sup>706</sup>

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701. For the most part, these particulars were informed by practices employed in the earlier Albegna Valley / *Ager Cosanus* survey, of which Fentress had been a part: Fentress *et al.* 1986 [1990]: 88, n. 10.

702. While, as already noted, we cannot establish the total land area surveyed, these figures are adequate to speculate concerning the proportion thereof which was actually *covered*. MHS, which employed teams of 4–6 field-walkers spaced 10 m apart—each of whom was instructed to collect all observed materials within 0.5 m of the notional line he or she walked—achieved a theoretical coverage of 10% of each area surveyed (Chapter 3, Section II). Assuming, for the sake of argument, that Contrada Mirabile field-walkers were responsible for collection within a swathe of similar width, the project will have achieved a notional coverage of 5–10% of the surveyed area.

703. Discussion, see Fentress *et al.* 1986 [1990]: 80.

704. The former term is used almost exclusively in Fentress' subsequent discussion, however.

705. Examples of which include columns and mosaic fragments: Fentress *et al.* 1986 [1990]: 80.

706. Fentress *et al.* 1986 [1990]: 81.

4. Village
5. Seasonal shelter
6. Quarry for building materials

The attributes of these three site-types are, after a fashion, the inverse of the first three: that is, they represent *heuristic* categories, the necessary criteria for which are nowhere explicitly stated. Under the circumstances, it seems best to treat Fentress' small and large farms as two sizes of the same generic type, the significance of which is something akin to "site of significant human activity, the character of which, on the basis of (apparent) lack of evidence for industry, may plausibly be related to habitation". This is a mouthful, but it is also more useful for purposes of analysis.

### 1.3. Results.

On the strength of the evidence collected by the survey, the area under study was first settled in the fourth–third century BCE.<sup>707</sup> The density of regional settlement, as attested by the number of sites with contemporary evidence for habitation, seems to have reached its apex during the Republican period. As of the beginning of the second century BCE, fully twenty-four sites existed, of which seven were characterized as "small farms/sherd scatters"; eight, as "large farms"; and nine, as "villas", according to the criteria elucidated in Section II.1.2.2. According to Fentress, this rapid expansion of settlement—indeed, the very fact of its inception—was a fruit of policies which Valerius Laevinus, the erstwhile (210-207 BCE) Roman governor, had formulated in order to ameliorate the damage done to Sicilian agriculture during the Second Punic War.<sup>708</sup>

The pattern of settlement established thereby was, by and large, a stable one. Following the disappearance of many smaller sites during the first century BCE—a phenomenon which Fentress interprets, in view of the concurrent multiplication of materials associated with those which remained, in virtue of a secular concentration of rural settlement<sup>709</sup>—the number of sites<sup>710</sup> remained unchanged for a period of

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707. Fourth century finds, including early black glaze vessels and Greco-Italic amphorae, were documented at four of the sites identified by the project: Fentress *et al.* 1986 [1990]: 80. Most of the rest, meanwhile, were founded during the third– or second century: a fact with important ramifications for her explanation of origin of local settlement (see below, with n. 708).

708. Fentress *et al.* 1986 [1990]: 83-84. The (Latin) text in which the initiative is mentioned, contra Fentress' indications, is from Livy (27.5.5-6), not Strabo (3.5). Nevertheless, Fentress' thesis is an interesting and—insofar as it synthesizes archaeological and literary information in relatively plausible fashion—*prima facie* persuasive one. Nonetheless, it is worth mentioning that, in at least one respect, it depends on an assumption which is typically rejected. In arguing for her characterization of the second-century BCE settlement pattern as a created "political geography", she explains the apparent alignment of attested sites with a (posited) series of perpendicular axes as evidence of centuriation. Specifically, she notes (1986: 80-81) that they coincide with a notional 20 x 20 actus ( $\approx 710 \times 710$  m) grid—represented, in Fig. 1, by the perpendicular black lines which overlie the survey zone—the orientation of which is furthermore echoed by a handful of modern roads and field boundaries. If so, it would be the first (and to my knowledge, only) instance of the practice on Sicily; cf. Wilson 1990: 39, who notes that "[t]here is no evidence for centuriation in the island".

709. Fentress *et al.* 1986 [1990]: 84-85.

710. It is difficult, for basically the whole Imperial period, to be very specific concerning the quantity of

some five centuries. The *character* of those sites, by contrast, was more changeable. On the strength of observations made during the excavation of Timpone Rasta, Fentress suggests that many of the "villas" documented by survey evolved into villages, perhaps even by the end of the early empire.<sup>711</sup>

Beginning in the fifth and especially sixth centuries, the number of sites presenting datable material<sup>712</sup> falls off precipitously. By the seventh century, only four were still occupied.<sup>713</sup> In keeping, however, with the hypothesized trend toward the nucleation of regional settlement, they were by far the largest.<sup>714</sup> Moreover, they were all sites which had been occupied, in one form or another, for several centuries. If we are to credit the results obtained by Fentress *et al.*, no new sites were founded in the region after the first century CE.<sup>715</sup> Insofar as it has been captured by the survey, the Roman history of settlement in the area of Contrada Mirabile was one which was characterized by continuity. Whether it is fair to join Fentress in characterizing it as one of "gradual stagnation",<sup>716</sup> however, is less clear, and will be considered in the following section.

#### 1.4. Evaluation.

The reasons for which it is sensible to proffer the Contrada Mirabile survey as a comparandum for MHS are relatively straightforward. Of the surveys undertaken on Sicily (and more specifically, in the west of the island), its area of study is the most proximate<sup>717</sup> to that with which MHS is concerned. It would stand to reason that some of the dynamics identified as relevant to the history of Contrada Mirabile—or, rather, its history as written by Fentress and her collaborators—might also have operated in our study zone, too.

As presented, however, those dynamics are a little misleading. The confusion is primarily a result of Fentress' deprecation of off-site material. The most obvious consequence of her disdain is a collection methodology which, as noted above,

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documented sites. We can, on the basis of the histogram Fentress supplies (1998: 40, Fig. 3.6), attempt to discern the *relative* quantity of sites attested for the period intervening between the first century BCE and the seventh century CE—and, with somewhat less confidence, to estimate the actual figures; as of the first century CE, it would appear that some seventeen or eighteen sites were documented—but we are nowhere provided with figures of the sort quoted for the Republican-period apex.

711. After the villa's collapse, sometime between 150–180, the remains of the *pars urbana* were adapted to a different use. "A new building on a far more modest scale was constructed against the east wall of the peristyle, and the wide distribution of domestic refuse suggests that it was not the only one. This was occupied until the middle of the fifth century, and, although we have no later constructions in the excavated area, refuse tips suggest that occupation continued elsewhere on the site until the end of the sixth or the beginning of the seventh century": Fentress *et al.* 1986 [1990]: 85. Fuller details concerning the excavation can be found in Fentress 1998.

712. Primarily African Red Slip (ARS) and African amphorae: Fentress 1998: 40.

713. As determined on the basis of attested late African Red Slip forms Hayes 104c, 105, and 109: Fentress 1998: 35.

714. "Site 5 covered 1.20 Ha, site 9 at least 2 Ha, and sites 7 and 8 almost 4 Ha": Fentress 1998: 41.

715. Fentress 1998: 40.

716. Fentress *et al.* 1986 [1990]: 85.

717. *Viz.*, of those surveys which are published in sufficient detail so as to serve as useful comparanda: see n. 687.

makes no allowance for such finds.<sup>718</sup> Off-site collection, it has repeatedly been shown,<sup>719</sup> significantly increases the likelihood that smaller and/or shorter-lived sites will be perceived. Fentress is explicit in warning that some quantity of the former, at least, are likely to have been missed.<sup>720</sup> But it is also reflected in some of the assumptions guiding her interpretation of the *on-site* finds. Fentress' dependance on large, stable sites as essentially the only evidence of human presence in the study zone means that virtually any change in paradigm will be understood, not *as* change, but as absence. Her history of the area's Late Antique phase—during which, as we have seen, a hitherto-extensive pattern of settlement apparently collapsed into four substantial foci of habitation—reflects this limited orientation. "In the areas dominated by slave villas", she says, "the small peasants, and the farms they lived on, had disappeared by the end of the Julio-Claudian period. There was no indigenous peasantry available" thereafter.<sup>721</sup> Perhaps there were no farms, but no *peasants*? The idea, implausible on its face, is difficult to reconcile with the transformation of the villa at Timpone Rasta. If, as Fentress proposes, a similar evolution affected the region's other villas, we need not assume that people simply disappeared—nor, in much the same vein, that "the lack of new building can be equated with a lack of investment in agriculture".<sup>722</sup> Notwithstanding the possibility that at least some of the inhabitants of these villages were engaged in non-agricultural activity,<sup>723</sup> most were probably farmers.

In view of the data obtained at Timpone Rasta, Fentress' reconstruction of Late Antique population and settlement dynamics is difficult to explain. To the degree that it is possible to do so, I am inclined to think that her conclusions owe less to the data as obtained than they do to a suite of (broadly dismissive) preconceptions concerning the period, the validity of which we may reasonably question.<sup>724</sup> This is not the place, however, to engage with Fentress' interpretive frame. Rather, I am

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718. For reasons articulated, forcefully, by the author herself: Fentress 2000: 46–48. In this respect, her methodology differs from that employed by MHS, at least in principle. In practice—which is to say, insofar as concerns the results presented in Chapter 4—it is indeed often the case that "on-site" finds, and those in their immediate vicinity, receive the majority of our attention. But our ability to define those "sites"—and, in the case of places like Casa Abbadessa and Timone Granatello, to speak to their evolution over time—is dependent materials that Fentress' methods do not countenance collecting.

719. By e.g. Caraher *et al.* 2006, the significance is considered in of Chapter 3, Section III.1.2.3.

720. The latter, meanwhile, are never specifically discussed. Fentress only once makes mention of such a site, and then only in passing: 1998: 35. Moreover, as discussed above, the "seasonal shelter" which she hypothesizes may have existed at site 5 during the sixth–seventh centuries is not a class which figures in the project's explicit site-typology.

721. Fentress 1998: 41.

722. Fentress 1998: 40–41.

723. A possibility which, it must be admitted, is not terribly compelling. The lack of prior evidence for pottery production, as reflected in the apparent absence of kiln sites during every period of the surveyed area, would seem to indicate that this most typical of industrial activities was not a feature of the area's occupational panorama.

724. As evidenced, for example, in Fentress' (1998: 41) description of Sicily during the "later empire" as "una fase di prolungata marginalità politica, di stagnazione sociale e produttiva, [è] di depressione culturale". The words are Cracco Ruggini's (1980: 3), but their object, in the article Fentress cites, is not "the later empire". Rather, they are a characterization of the first four centuries, during which Rome was able to depend on the regular shipment of Egyptian corn (on which see Chapter 2).

interested in attempting to more accurately characterize the dynamics which she observes. To that end, it is possible to suggest a number of more plausible explanations for the fifth-century reduction in sites.

First, it may have meant a centralization of disparate rural activities, specifically at the larger sites which survived. (In which respect, it is worth noting, the villages documented by e.g. the Heraclea Minoa survey provide a model; Campanaio was a site of more than simply agricultural endeavor.<sup>725</sup>) Alternatively, in view of the six-fold reduction in number of (stable) sites vis-à-vis its second-century BCE maximum, that some of the activities which had previously taken place in the countryside ceased to occur there. It is possible that this phenomenon actually corresponded to a diminution of the rural population, as Fentress argues; but if so, it worth asking where our missing people actually went. The range of answers is relatively wide, but it is not infinitely so. Among other things, it is constrained by the data themselves. At least in the area of Contrada Mirabile, where sites founded before the beginning of the Common Era continued in use all the way up the seventh (and perhaps twelfth- or thirteenth<sup>726</sup>) century, it does not seem likely that historically-attested conflicts—owing, in specific, to Vandal and subsequently Muslim aggression—had a very pronounced effect on patterns of settlement.

## 2. Heraclea Minoa.

### 2.1. Introduction.

Between 1977–1978, Roger Wilson directed two seasons of intensive field survey in the vicinity of the ancient Greek city of Heraclea Minoa.<sup>727</sup> The survey was aimed at providing a regional context for scholars' already-extensive knowledge concerning the ancient Greek city.<sup>728</sup> Heraclea Minoa, which was purportedly founded in the middle of the sixth century BCE and abandoned in the third quarter

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725. see n. 751.

726. Fentress *et al.* 1986 [1990]: 81.

727. The Heraclea Minoa survey is noteworthy for being the first systematic intensive survey done on Sicily: Spanò Giammellaro *et al.* 2008: 138–140.

728. Obtained, in the main, during the course of excavations directed by De Miro beginning in the 1950s: De Miro 1955; De Miro 1958. The "regional context" included, in principal, the answers to questions like the following (Wilson & Leonard, A. 1980: 220–221):

1. Did the inhabitants of the archaic and classical city go out to the fields each day, or was there, in addition, a rural population living in villas and farms in the immediate hinterland of the city at this period?
2. Does the apparently drastic reduction in the city's size during the 3rd century B.C. indicate a general de-population of the area or merely a greater population in the countryside than hitherto?
3. What happened in the Roman imperial period when the city itself was deserted? Was there any market center nearby which can be regarded as the successor of the Greek city to the produce of the rich and well-watered Platani valley? If one existed, did it lie on or near the Roman coastal road between Agrigento and Sciacca that is attested in the road handbooks? Where precisely ran the Roman road?
4. What were the most significant changes of the post-Roman landscape in the area of the former Greek city?

of the first,<sup>729</sup> is located at the mouth of the Platani River approximately 25 km west of Agrigento on the southern coast of Sicily. The Platani served as the western and northern boundaries of the area to be surveyed. Like the region explored by MHS, this is a variegated landscape. In the vicinity of the coast, there is a region of low-lying plains subject to periodic alluviation by the Platani (and to a lesser degree, two smaller streams located to its east).<sup>730</sup> Before the beginning of irrigation in the 1960s—and the consequent development of the extensive arbor- and viticulture which has come to dominate the region—this area was largely given over to the cultivation of cereals. Further inland, meanwhile, the terrain is characterized by relatively-greater topographic relief. In the vicinity of modern Montallegro, at the eastern edge of the survey zone, this becomes an area of rocky plateaux separated by escarpments both precipitous and gentle.

During the course of three weeks, in toto, some 20 km<sup>2</sup> of the region were investigated.<sup>731</sup> Originally, it was intended that subsequent seasons would allow for the enlargement of this area.<sup>732</sup> Ultimately, however, the project directors chose to dedicate their efforts to the excavation of two site located in the survey zone: Campanaio and Castagna.

## 2.2. Methodological notes.

### 2.2.1. Collection methodology.

Relative to some of the other projects discussed in this chapter, the c. 20 km<sup>2</sup> investigated by the Heraclea Minoa survey is a comparatively modest area. It was also, however, a well-covered one, owing to the project's decision to place individual field-walkers a mere 5 m apart.<sup>733</sup> Project participants were deployed in pre-determined 1 x 1 km transects and instructed to recover all artifacts encountered within their borders.<sup>734</sup> Areas of particular density—subsequently to be designated "sites"; see below—were measured and subjected to a still more exhaustive

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729. Wilson 1981: 256.

730. Viz., the Fosso della Gurra, which runs south-southwest from the Laghetto Gorgo to disgorge c. 2 km southeast of Heraclea Minoa, and the Fosso del Pantano, which takes a meandering course from its origin above modern Montallegro to its mouth 3 km south of the latter city.

731. Of which the greater part was done during the second season; the first, which lasted for a period of eight days in 1977, surveyed a total of 6 km<sup>2</sup> to the immediate north of Heraclea Minoa: Wilson & Leonard 1980: 221.

732. "[T]his has so far been a small scale project, but it is hoped to expand the survey area in future years if funds permit and to initiate excavation at one or more sites": Wilson 1981: 251.

733. More or less. "In vineyards", Wilson & Leonard 1980: 221 note, "two or three rows [were] left between each walker". As discussed in Chapter 3 of this thesis, our experience in the area under study by MHS demonstrated that the spacing between vineyard rows was almost uniformly 2.5 m (cf. Blake & Schon 2010: 52). If this was so in the area of the Heraclea Minoa survey, too, then three rows' distance would be 7.5 m instead.

734. The 1 x 1 km areas selected for survey correspond to subdivisions of the 1:25 000 scale 1970 IGM Carta d'Italia, sheet 266 II S.O. (Capo Bianco). (Artifacts recovered therein were brought back to the Antiquarium for study and, ultimately, storage.) . During the first season, which lasted for approximately 8 days in August, 1977, 10 field-walkers covered an area of c. 6 km: Wilson & Leonard 1980: 221.

collection. Finds were washed after field-walking and deposited in the Antiquarium at Heraclea Minoa, there later to be studied at greater length.<sup>735</sup>

### 2.2.2. Site characterization.

Like the directors of the Monreale survey,<sup>736</sup> Wilson was not interested to develop explicit site-types or –criteria. In contrast to that project, however, the Heraclea Minoa survey does not suffer from a concomitant reduction in transparency. This is because many of the sites identified by the project are discussed, in detail, in the publication of the first season's results.<sup>737</sup> As such, the sorts of issues raised in respect of site classification at Monreale are less salient here. We need not ask ourselves whether all of the sites identified as "farms" are actually similar with regard to their archaeological manifestation, since many of them are described in the site catalog.

So, too, are the other types of sites invoked by Wilson, which principally include villas, villages and tombs. Graves are frequently identifiable on the basis of their architectural features (i.e., rock-cut cysts) rather than their contents.<sup>738</sup> His villages, meanwhile, are distinctive for the range of finds recovered and the often-complex articulation of their patterning on site.<sup>739</sup> And his villas (sites 3 and 5) are distinguished by the presence of more, and more varied, luxury goods, among them pewter and fine glassware.<sup>740</sup>

Indeed, it is because Wilson is so transparent concerning the material characteristics of his sites that we are also able to see where he goes beyond what the archaeology what seem to suggest. Prestige goods like those just mentioned are reasonable grounds on which to characterize the sites where they were discovered as "villas", in the sense of "sumptuous rural residences"; but they are not in themselves sufficient to demonstrate they were necessarily "the centres of new large farming estates", as Wilson proposes.<sup>741</sup> The hypothesis is sensible, given what we know (from the texts) concerning the Roman Sicilian countryside, but it is also essentially unprovable. Absent textual information, we cannot know what sort of relationship obtained between sites 3 and 5; the lands in which they were located; and other settlements found in the area. His speculation notwithstanding, Wilson is aware of this limitation. To his own question regarding whether or not a handful of fifth century farms should be interpreted as free holdings or tenant properties, he answers with Stevens' cautious reminder: "You can dig up a villa, but you cannot dig up its land tenure".<sup>742</sup> As it happens, the *bon mot* is appropriate in specific as well as

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735. Wilson & Leonard 1980: 221.

736. Discussion, see Section II.3.2.2.

737. *VIz.*, in the section "Results"; Wilson & Leonard 1980: 222ff. Wilson 1981 updates these findings to reflect the results of the project's second season, but the sites documented therein are not, unfortunately, described in such explicit detail.

738. E.g. site R2: Wilson & Leonard 1980: 234–235.

739. Campanaio: Wilson 2000a.

740. E.g. site R1: Wilson & Leonard 1980: 231–234.

741. Wilson 1981: 256.

742. Stevens 1966: 108, quoted by Wilson 1981: 258. The farms in question are 7, 9, 10, and 11 on Wilson 1981: Fig. 20.4.



general terms: the findings from survey were augmented by data from the excavation of sites 3 and 5 (known, respectively, as Campanaio and Castagna).<sup>743</sup> The results of these excavations—which, in certain respects, alter the interpretation of both sites on the basis of surface materials—do not constitute a part of the process of "site characterization", insofar as the latter is a question of survey methodology. But they are significant for Wilson's conclusions, and as such, are treated together with survey project results, below.

### 2.3. Results.

Difficulties in dating Black Glaze wares characteristic of the local Hellenistic period—which, in Wilson's terms, also encompasses the period of Roman Republican control<sup>744</sup>—render it all but impossible to know whether the earliest Roman settlement was, in fact, pre-Roman in its origins. With scant (fourth-century BCE?) exceptions, however,<sup>745</sup> the earliest *dateable* materials are all from the second or even first century BCE. They were discovered at 4 "suburban" farms located to the north of the city of Heraclea Minoa and 7 or 8 further inland.<sup>746</sup> The expansion of settlement throughout the countryside, Wilson surmises, was encouraged by the atmosphere of security which followed the solidification of Roman control.<sup>747</sup>

Whether or not Roman settlement *enabled* these settlements, however, it did not long sustain them. Some 25 years before the change in era, all but 2 of these sites were abandoned.<sup>748</sup> (So, too, was the site of Heraclea Minoa itself.<sup>749</sup>) Those which remained, however—to wit, Campanaio and Castagna—grew substantially.<sup>750</sup> Whether or not they also became "villas"—the excavation of Castagna and Campanaio suggested that the former was more probably a prosperous mid-range

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743. Campanaio: see Wilson 2000b. Castagna: Wilson 1985; Wilson 1993 [published 1996]; Wilson 1996b.

744. Viz., the late fourth–late first century BCE: Wilson & Leonard 1980: 222. The second article is little more specific: Wilson (1981: 252) defines the Hellenistic period as the three hundred years between 330–30 BCE.

745. Viz., several fragments of a black glaze bowl or salt cellar paralleled by examples from the third quarter of the fourth century BCE: Wilson 1981: 252.

746. Wilson 1981: 252–254.

747. Wilson & Leonard 1980: 227. In deference to the alternative possibility—that such sites were actually founded in the pre-Roman period—Wilson 1981: 254 entertains an alternative explanation for the settlement of the countryside (specifically, having to do with the mid-third century construction of a wall which reduced the area of Heraclea Minoa, and, in consequence, drove a part of the urban population outside the city). If, however, Campanaio and Castagna were at all typical of local settlement, then the plausibility of this alternative explanation decreases substantially. Results from excavation indicate that neither site was inhabited much before the beginning of the second century BCE: Wilson 1985; Wilson 2000b: 365.

748. A development which Wilson cannot entirely explain, but which, he hypothesizes, might be in some measure connected with depredations resulting from the Civil War fought between Pompey and Augustus: Wilson 1981: 256.

749. Wilson 1981: 256.

750. The scatter of Roman Imperial materials at Campanaio measured 180 x 180 m, while that at Castagna covered 150 x 130 m: Wilson 1981: 256. Wilson does not specify the extent of earlier materials attested on site, but if they were at all comparable to the scatter-sizes associated with the farms which *disappeared* (sites 8, 10, 11, and 13 on Wilson 1981: Fig. 20.2, all measuring about 50 x 35 m), they grew by an order of magnitude.

farm, and the latter, a "village"<sup>751</sup>—they were undoubtedly the focus of local settlement. Moreover, they were virtually the *only* local settlement, for several hundred years at least.

The first four centuries of the Common Era were characterized, above all, by the durability of the established settlement pattern. In all this time, there was apparently only one new foundation (the vocation of which, furthermore, cannot be clearly stated).<sup>752</sup> The fifth century, in contrast, was a time of transformation. While, on the one hand, the settlements at Campanaio and Castagna were being abandoned—in the wake, at least at Campanaio, of some violently destructive event, which Wilson places in relation with the Vandal incursions of the mid-fifth century<sup>753</sup>—new settlements were in the process of formation. One of these, which was located much nearer the coast than either Campanaio or Castagna, grew to similarly impressive dimensions.<sup>754</sup> This time, however, it was not to be the sole focus of habitation. The period of its occupation (c. 425–600) also saw the appearance of several small farm sites.<sup>755</sup> Their scattered distribution—the northern- and southernmost sites are separated by nearly 5 km<sup>756</sup>—contributes to Wilson's impression of "a more dispersed pattern of settlement in late Roman and early Byzantine times".<sup>757</sup> So it may have been; but it was also, apparently, a less durable one. Notwithstanding a group of inhumations at Campanaio, which Wilson characterizes as Muslim on the basis of the bodies' orientation toward Mecca, neither survey nor excavation have produced any materials of seventh century or later date.<sup>758</sup>

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751. "Castagna is a farmstead with some ancillary buildings; Campanaio is a larger site, almost certainly a sprawling agricultural village": Wilson 2000b: 337. The latter played host to a wide range of activities, including, it would seem, oil production (Wilson 2000b: 341) and ceramic manufacture (Wilson 2000b: 355).

752. This is site 7 on Wilson 1981: Fig. 20.3, which extended c. 100 m eastward from the bank of the Platani River. The author suggests (1981: 258) that it was either a farm—in which case "it would be odd to find it so close to the river", rather than on a slope overlooking the floodplain—or a kiln site (for which the evidence is limited to a lens of burnt and discolored soil and a lump of "accidentally fired" clay). In either event, it does not appear to have survived into the fifth century.

753. Viz., a fire, which appears to have affected most parts of the site: Wilson 2000b: 350–351. The evidence for subsequent activity on site is sparse. Campanaio reported some scattered materials of late fifth–early sixth century date, as well as a group of tombs which Wilson identifies as Islamic on the evidence of their orientation toward Mecca. No Arab- or Norman period materials were actually found, however: Wilson 2000b: 351–352.

754. Viz., site 1 on Wilson 1981: Fig. 20.4, which boasted a surface scatter measuring some 200 x 150 m: Wilson & Leonard 1980: 231.

755. Viz., sites 7, 9, 10, and 11 on Wilson 1981: Fig. 20.4.

756. Respectively, sites 7 and 11 on Wilson 1981: Fig. 20.4.

757. Wilson 1981: 258.

758. The latest dateable finds, from Campanaio as well as from Castagna, are from the sixth century: see, respectively, Wilson 2000b and Wilson 1985: 11. And there is nothing from field survey, either, at least as of the first season: Wilson & Leonard 1980: 235–236. (Wilson 1981, which treats both seasons' results, does not even touch upon the Medieval period: a fact which might simply reflect a particular emphasis, but which is nonetheless arresting.)

#### 2.4. Evaluation.

For purposes of comparison with the results obtained by MHS, the Heraclea Minoa survey is, at least in principle, useful as a sort of geographical "control". While its location on the south-central shore of Sicily makes it the most distant of the projects treated in this chapter, it is also, save for Contrada Mirabile, the most similar in respect of its topography. Both in its proximity to the sea, and the range and types of terrain, the area bears a certain resemblance to the hinterland of Marsala. As such, I reasoned, the degree to which their results were similar might shed some light on the relative significance of such factors vis-à-vis the inevitable differences in the experience of two such distant Sicilian regions.<sup>759</sup>

In this respect, Wilson's findings do not lend themselves to a definitive statement. Provided we are willing to accept his reconstruction of events, the development of local settlement followed a course in equal parts familiar and unfamiliar. As in the area of Marsala, a late Hellenistic landscape of scattered modest settlements evolves, during the centuries of Roman rule, into one which is dominated by a smaller number of larger, more multifaceted sites. The resemblance is not merely a question of general impressions, however. It is also in the details, or some of them, at any rate. Noteworthy, in this regard, is the fact that the process of rural consolidation occurred at basically the same time. The moment of most dramatic involution, in terms of quantity of sites, appears to have been the second half of the first century BCE. Moreover, the sites which survived this "crunch", and subsequently thrived, display some notable similarities.

The "winners" of rural consolidation, at Heraclea Minoa as at Marsala—but not, by contrast, at Monreale<sup>760</sup>—originated in the period *prior* to Roman control. And they were located in places which, in several respects, recall those occupied by SL and GE. Like these last, Campanaio and Castagna were "situated on pleasant slopes enjoying commanding views".<sup>761</sup> By itself, this is hardly dispositive; a number of similarly-sited settlements disappear.<sup>762</sup> But they *also* share SL and GE's proximity to a probable Roman trunk route. Campanaio and Castagno are adjacent to the modern provincial road SP 61, which, Wilson believes, more or less faithfully recapitulates a segment of the Roman road between Lilybaeum and Agrigentum.<sup>763</sup> A final

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759. On which see, i.a., Malfitana 2004, who suggests that the Roman period witnessed the development of two distinct (if partially overlapping) spheres of exchange. The west of the island maintained stronger links with Italian Peninsula and Roman North Africa, while the east of the island was in more regular contact with the Byzantine east. This is variation on a larger scale than this thesis deals with, but would be worth engaging at a later phase of this research: see Chapter 6, Section V.1.

760. See following section.

761. Wilson 1981: 256. As far as MHS sites are concerned, the characterization is more neatly descriptive of Genna than San Leonardo, the best views from which face westward toward the sea, and more specifically the Stagnone—which, as a closed body of water, was an improbable whence threats might come.

762. E.g., the four suburban farms (n. 746) perched north of Heraclea Minoa, which, during their Hellenistic-era heyday, boasted commanding views of the river valley winding further inland.

763. Wilson 2000b: 337. The association, as presented, is actually with the "old" state road SS 115, the present incarnation of which no longer passes by the sites in question. The part which *did* has come to constitute a part of SP 61 as it currently exists.

similarity, meanwhile, concerns the *other* sites in the region. As in the area surveyed by MHS, Heraclea Minoa witnessed a late (fifth century) resurgence of small, relatively scattered settlements.<sup>764</sup>

In other respects, however, local settlement history was distinctly different. The hinterlands of Marsala and Heraclea Minoa, it is true, both witnessed the appearance of new<sup>765</sup> sites in the late Roman period. But in the area of Marsala, this was not the first such florescence: Piscitello, as observed in Chapter 4,<sup>766</sup> was probably founded in the middle of the second century. Nothing analogous occurred at Heraclea Minoa, where the second century—when not to say also the third— and fourth!—was characterized by a basically static settlement hierarchy.

Come the fifth century, in contrast, Heraclea Minoa witnesses relatively *more* significant change. The abandonment of Campanaio and Castagna, and the foundation of a new first-order settlement less than a kilometer northeast of the old Greek city,<sup>767</sup> is a development without parallel in the area studied by MHS. The preeminence of SL and GE, once established, went unchallenged for the remainder of our period. When, that is, not actually *beyond*; which, I think, points toward a final difference. On the basis of the materials to hand, the area of Heraclea Minoa seems to have been much more thoroughly abandoned, following the period of Byzantine control. It is possible that the absence of early Medieval materials might be misleading; as noted throughout this thesis, these remain difficult to recognize. But the evidence for eleventh century and later presence—that is, during a period which we *can* readily identify, on the basis of several much-better-known glazed wares—is equally sparse. Vis-à-vis Marsala, Heraclea Minoa's post-Roman fate looks pretty conclusive.

What are we to make of this litany of similarities and differences, specifically with respect to the question posed at the outset of this section? The discrepancies, at first blush, would seem to undermine the notion that the two areas' topographical similarities exercised much influence on local settlement history. In fact, this impression is incomplete. The majority of the differences described above, it is worth noting, belong to the later phases of the areas' history, while the similarities are mostly earlier. The most straightforward explanation of this phenomenon, I submit, is that there occurred a change in the relative significance of broad— versus locally-particular factors. During the first century BCE–I CE, the former sort—including, but not limited to, the two areas' comparable geography, on which see below—were predominant, and developments resembled one another. Thereafter, it would seem,

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764. Comprising, specifically, the sites labelled 7, 9, 10, and 11 on Wilson 1981: Fig. 20.4. In the area of Marsala, this phenomenon gave rise to the (re-)occupation of Casa Abbadessa and, perhaps, Timpone Granatello: Chapter 4, Sections II.8.5 and III.2.2.

765. Strictly speaking, in the area of Heraclea Minoa: none of the sites founded in the fifth century had previously been occupied. In the area of Marsala, as observed in n. 764, it is probably more accurate to speak of renovation than innovation. The fifth-century occupation of Casa Abbadessa and Timpone Granatello constituted a resumption of activity on sites which had been settled in the Hellenistic period before being abandoned. It is impossible, in light of present knowledge, to say whether the memory of this earlier occupation was preserved (let alone relevant to their "reactivation").

766. Section II.6.4.

767. Viz., site 1 on Wilson 1981: Fig. 20.4, which was located on a bluff overlooking the Platani River valley.

their trajectories were increasingly shaped by what they did *not* have in common. It is probably impossible to describe all of the factors encompassed by so general a formulation, but one, at least, can be identified. If Wilson is correct in tying Campanaio's mid-fifth century destruction to the incursion of Vandal raiders, then it would be that the latter's depredations were more heavily felt near Heraclea Minoa than in the hinterland of Marsala. To be sure, the *city* suffered from their attentions, but there is very little indication that other rural sites were affected.<sup>768</sup>

More generally, I do not think we should be too surprised by the sort of divergence posited here. A signal feature of Sicilian history, as explicit in the earlier written sources—and implicit in the sparsity of apposite later texts<sup>769</sup>—is the diminishing intensity of imperial attention spent on the island. During the period of its conquest, and throughout the years when it was charged with provisioning Rome, Sicily sustained the interest of the state. During the middle- and later imperial phases, by contrast, it was frequently the object of a (more or less) benign neglect. In these circumstances, it was easier for different regions' experiences to diverge.

In this light, it is worth making a final comment regarding the salience of the factor on which the examination of Heraclea Minoa was predicated: the resemblance of its topography to that of Marsala. Given the similarity of the sites occupied by these areas' most significant settlements, it would not do to dismiss its relevance, especially the early Roman period. Later on, however, it seems to have been pretty conclusively overshadowed. The evolution of regionally-distinctive settlement patterns suggests that other concerns were becoming more influential. The significance of this fact is one to which I will return, at the conclusion of this chapter and in the one which follows.

### 3. Monreale.

#### 3.1. Introduction.

The Monreale Survey grew out of research conducted by Jeremy Johns, pursuant to his D. Phil. at Oxford.<sup>770</sup> The project began with some limited field-walking in 1981–1982, the results of which were sufficiently encouraging to mount a larger and more formal campaign.<sup>771</sup> Between 1983–1989, five seasons of fieldwork were carried out in an area corresponding to the late-twelfth century possessions of the monastery of Santa Maria di Monreale.<sup>772</sup> The territory encompasses some 1200 km<sup>2</sup> of the Bal Velice, as bounded, to the north, by Monreale; to the south, by Sambuca; to the west, by Alcamo; and to the east, by Prizzi. It is a region of heavy but fertile clay soils and sporadic large rock outcroppings. Notwithstanding the latter, it is also an extensively cultivated region; as of 1985, fully 60% of the total

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768. With the possible exception of San Leonardo; see Chapter 6, Section III.1.

769. On which see Chapter 2, Section II.2.1.

770. Johns 1983.

771. Support for which was provided by a variety of universities and foundations; details, see Johns 1992: nn. 1, 2.

772. Details, see Garufi 1902.

surface was under seed. Wheat was the principal crop, but had increasingly yielded ground to grapes for wine.<sup>773</sup>

At the outset of the project, Johns envisioned systematically covering 20% (c. 240 km<sup>2</sup>) of the monastery's estate.<sup>774</sup> The area which was actually surveyed, however—as indeed final find- and site figures—remains unknown, owing to the fact that a final publication has yet to appear.<sup>775</sup> The most complete treatment to date, which is primarily focused on the Medieval materials, regards the findings from a 14 km x 5 km transect extending N–S from the southern slope of Monte Iato to c. 2 km south of Monte Maranfusa (Fig. 48). Its total area, (72 km<sup>2</sup>), including both the 70 km<sup>2</sup> within the transect as well as a "piccolo prolungamento" of 2 km<sup>2</sup> on the transect's eastern border,<sup>776</sup> represents some 6% of the notional survey universe. As Johns admits, the sampled area is less than perfectly representative of the district's topographical diversity.<sup>777</sup>

### 3.2. Methodological notes.

#### 3.2.1. Collection methodology.

The fullest articulation of project methods is provided in an article published in 1988.<sup>778</sup> Survey transects like the one described above were subjected to extensive and, where deemed appropriate, intensive survey.<sup>779</sup> 1–2 groups of extensive survey participants, each comprising 4–6 individuals, were assigned to each transect. Field-walkers, who were spaced from 15–25 m apart from one another, proceeded in parallel—insofar as was possible, given the local topography<sup>780</sup>—along the long axis of their transect. All the while, they recorded the area walked and the use to which the land was put. Their most important task, however, was to note the location of "sites"<sup>781</sup> for intensive survey later.

In specific terms, this primarily entailed two things. First, intensive survey participants were much more closely distributed.<sup>782</sup> And second, they were tasked with total artifact collection, or something very near. These field-walkers were

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773. This description substantially recapitulates that in Johns 1985: 217.

774. Johns 1985: 215. Johns reckoned that it would take ten seasons of fieldwork to do so: Johns 1988: 78.

775. "Fieldwork was carried out between 1983 and 1989 but has, apart from the medieval evidence, only been very summarily published": Spanò Giammellaro *et al.* 2008: 137.

776. The addition of which was justified, in keeping with Johns' defense of "judgemental" sampling practices, by the presence therein of Monte Raitano, "ricchissima di siti archeologici": Johns 1992: 407. On "judgemental" survey—which may be succinctly defined as "[s]urvey methods based on subjective motivations, whether indications from locals or the archaeologists themselves assessing the probable find-spots based on topographical or geomorphological characteristics" (<http://www.surveyarchaeology.eu/Unsystematic+or+Judgmental+Survey> [accessed 14 December, 2014])—see Keller & Rupp 1983 and Cherry & Shennan 1978: 23.

777. Johns 1992: 408.

778. Johns 1988.

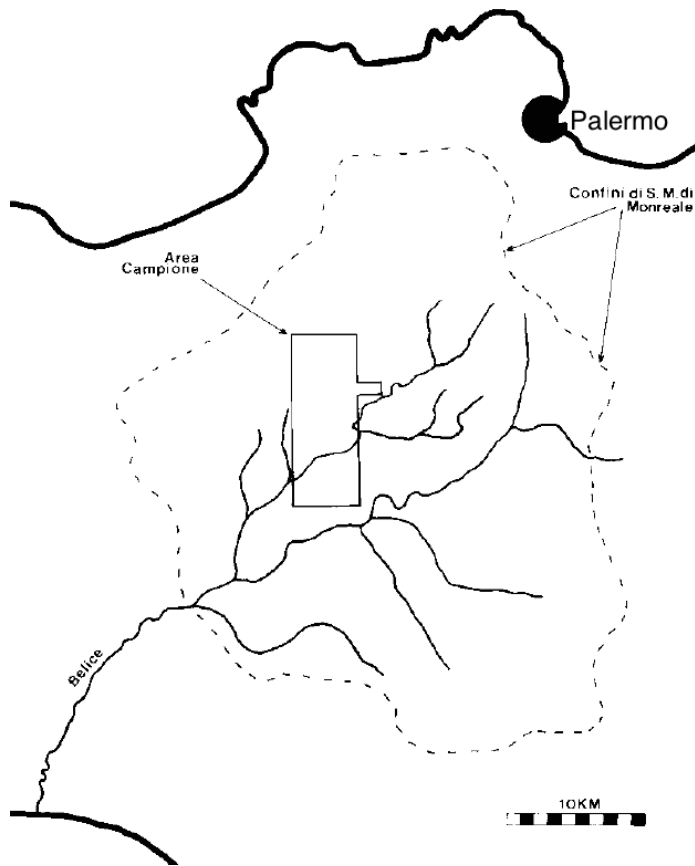
779. Which Johns rather charmingly describes as "il metodo del cacciatore" and "il metodo del raccoglitore", respectively: 1988: 79–80.

780. Walkers were instructed privilege similarity of elevation rather linearity of route—i.e., around a hill, rather than up and down it—when these two things were in conflict.

781. A discussion of this term, and its use by the project under discussion, follows in Section 3.2.2.

782. *Viz.*, At a maximum of 15 km distant from one another. The greatest interval countenanced for intensive survey is equivalent to the *smallest* for extensive survey.

responsible for collecting "tutti i manufatti di valore diagnostico o potenzialmente diagnostico" found on site.<sup>783</sup>



### 3.2.2. Site characterization.

In contrast to other projects treated in this chapter, the Monreale Survey is distinguished by its lack of an explicit site typology. It is possible, of course, that this lack is simply a casualty of the project's incomplete publication, but there is some evidence that it may have been deliberate. In view of the problems inherent in defining a "site", whether in notional or specific archaeological terms, Johns evinces some skepticism regarding the value of establishing categories a priori. Instead, he prefers to gradually build a typology based on the interpretation of finds discovered during survey.<sup>785</sup>

Fig. 48: Monreale survey universe and sample area.<sup>784</sup> The strength of this approach is a greater sensitivity to local conditions. On the other hand, such categories are almost inevitably less transparent, when not also less internally consistent. Unless the authors are careful to record the criteria on which a given identification was made, and to apply them to subsequent cases, it is entirely possible for two different sites—in respect, that is, of their specific archaeological manifestation—to both be classified as e.g. "farms", or contrary-wise, for basically similar sites to be classified differently.

In the event, it is difficult to know with which of these scenarios we are faced. Johns' terminology is not entirely consistent—he variously refers to the same sort of sites as "fattorie", "piccoli insediamenti agricoli", and "piccoli centri agricoli"<sup>786</sup>—but he appears to treat five, or possibly six, basic site types. In addition to the fattorie already mentioned, these include "casali"; "città"; "ville"; and "villaggi".<sup>787</sup> Of these

783. Johns 1988: 80. As the author goes on to explain, the latter category was designed to be capacious. Among the objectives Johns articulates is the generation of local Medieval ceramic typologies, the construction of which required an ample selection of comparanda.

784. Adapted from Johns 1992: Tav. XLVI.1.

785. Johns 1988: 80.

786. Johns 1992: 412–414.

787. All occur *passim* in Johns 1992. The sixth type—"rifugi[o]"—is mentioned but a single time (Johns



five, only the village is described in any detail, and then only with reference to the period of its first occurrence as a distinct archaeological phenomenon.<sup>788</sup> As this period is the Bronze Age, however, it is unclear how closely such villages can be expected to resemble their Roman-era analogues. (The more so, given that Johns argues for a solution of continuity between the Bronze Age and later phases.<sup>789</sup>) Under the circumstances, we are basically constrained to accept the sites as characterized.

### 3.3. Results.

Notwithstanding the existence of Bronze Age antecedents, settlement during the period of this thesis was the result of much more recent developments. Roman patterns of habitation represented the evolution of a settlement hierarchy, the origins of which can be traced back to the fourth century BCE.<sup>790</sup> The more than thirty sites dated to this period are mostly small and widely dispersed throughout the surveyed area.<sup>791</sup> In subsequent centuries, however, this pattern underwent several notable changes. The first of these occurred in the late third–early second century BCE, when, it appears, rural settlement essentially collapsed. Virtually none of the sites just mentioned show evidence of activity during this period. And while it is possible that the caesura is less complete than it seems—owing, per Johns' admission, to a "conscenza imperfetta" of all the recovered materials<sup>792</sup>—it cannot have been entirely illusory. Of the 19 sites which were occupied during the Roman Republican period (second–early first century BCE), only three had been active during the previous phase.<sup>793</sup> The rest, meanwhile, were new—and what is more, quite differently distributed. In contrast to the widely-scattered settlements of the Hellenistic period, Johns' Republican sites are concentrated in the northern third of the survey transect.<sup>794</sup>

The transition to Johns' Early Imperial phase (late first century BCE–first/second century CE) does not seem to have entailed so great a rupture: fully 17 of the 19 Republican sites show evidence of occupation in the subsequent period, too.

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1988: 83), and it is unclear whether the term is meant to refer to a distinct type of site or simply functions to highlight a characteristic—in context, the word seems to imply a measure of elevation, and consequently defensibility—which might equally pertain to several kinds of sites.

788. Among the characteristics cited: location on hilltops or other defensible prominences; houses built in two parallel series flanking a central thoroughfare; a wide variety of material culture, much of it located inside the structures just cited: Johns 1992: 410–411.

789. "Nonostante la maggior parte dei siti topografici occupati in [the Iron Age] siano anche stati occupati nell'Età del Bronzo, non si può dimostrare continuità d'insediamento tra i due periodi": Johns 1992: 412.

790. Or, in broader terms, the "periodo dell'influenza greca", which encompasses the sixth–fourth centuries: Johns 1992: 413. As noted by Perkins 2007: 38–39, however, the development of rural settlement does not appear to much predate the beginning of the fourth century: earlier evidence for local habitation was almost entirely restricted to the urban sites at Monte Maranfusa and Monte Iato (the latter outside the survey transect proper).

791. In total, 35, as depicted in Johns 1992: Tav. XLVIII.2 ("Il periodo ellenistico").

792. Johns 1992: 413.

793. Viz., those numbered 140, 131, and 12: cf. Johns 1992: Tav. XLVIII.2 and Johns 1992: Tav. XLVIII.3.

794. A distribution which Johns (1992: 413) hypothesizes was the result of "colonizzazione" from the area of Monte Iato, nearby.

Nevertheless, important changes occurred. First, the number of sites seems once again to have multiplied. In addition to the 17 just mentioned, activity was documented at a further 10 sites (many of them, it is worth noting, in the southern part of the survey area). And second, many of the earlier sites appear to have grown. Several of those which were previously categorized as "fattorie", or modest farms, develop into "ville", and among those which do not, Johns reports, many increase in size.

The latter trend, it seems, had legs, even if the former did not. With the exception of a farm founded in the old urban core of Monte Maranfusa, probably sometime in the late fifth century, the remainder of this thesis' period of interest witnessed no new foundations in the area treated by Johns. Pre-existing sites, however, continued to grow. Beginning around the middle of the third century, all of the sites which had developed into villae, as well as a handful of those which remained small farms, evolved into "grossi villaggi agricoli". As previously indicated, it is not always clear what this *meant*, in specific archaeological terms, but it seems to have entailed at least one sort of transformation. Finds from these villages reflect the inauguration of small-scale industry (the specific character of which Johns does not discuss) alongside the domestic and agricultural activities already attested.

The fate of all these villages, unfortunately, is pretty opaque; at the time of publication (as indeed to a lesser degree now) scholars' knowledge of the ceramics pertaining to the later Byzantine and especially early Arab periods of the island's history was so scanty as obscure developments during the period in question. Nevertheless, there is circumstantial evidence for the long-term stability of at least some of these late Roman village sites. About half of the sites at which were documented late sixth–seventh century ceramics also reported sherds pertaining to earliest (tenth–eleventh century) invetriata wares characteristic of Arabic Sicily.

### 3.4. Evaluation.

First, it is worth repeating: the incomplete publication of Johns' findings renders any assessment provisional, at best (a fact which the author, as we have already seen, is quick to admit). Nevertheless, I am chary of dismissing his project's results. The developments they purport to reflect, far from being implausible, bear some resemblance to trends documented by other surveys (including MHS). The dates are not always consistent, but many of the phenomena—the development of sparse, but apparently widespread settlement during the Hellenistic period; the consolidation of settlement under Roman rule; and the continuous habitation of at least some Roman sites through (and possibly beyond) the period of this thesis—are familiar. Not everything else is, however. It would, for instance, be useful to have more detail regarding the sort(s?) of activity which Johns characterizes as "industrial". (The production of ceramics, to take one possibility, would be noteworthy, given that the date of Johns' "industry" is characterized elsewhere in Sicily by the frank predominance of imported wares.<sup>795</sup>)

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795. E.g. at Segesta, where the prevalence of imported African finewares and especially amphorae does not merely speak to an anemic local ceramic industry, it also, Cambi hypothesizes, is evidence of a less diverse *agricultural* regime, in which even staples like oil were imported: Cambi 2005: 632.

Furthermore, the opacity of Johns' categories renders difficult even some of the more superficially-straightforward parts of his narrative. Johns' description of the evolution of Republican farms into early Imperial villas is relatively clear on what this meant, in regard to the sorts of remains characteristic of each.<sup>796</sup> But he is less transparent concerning the implications of these villas' subsequent transformation into Late Roman and Byzantine villages. It is not that such a transformation is especially difficult to credit; similar developments are a feature of Late Roman settlement history, in Sicily as elsewhere.<sup>797</sup> But it was frequently the case that this transformation was effected without radical alterations to the villa's material footprint, at least at first. The change had as much to do with the ways in which people occupied the space as it did with changes they might have made to it. As such, it would be useful to know what made it visible.

Finally, there is the question of what happened between the Hellenistic and Roman Republican periods. As presented above—that is, as a process of consolidation, whereby a subset of settlements appear to have grown at the expense of others, which consequently disappear—it bears an obvious resemblance to developments witnessed elsewhere. As evidenced by its inclusion in the list of "familiar" phenomena, I think the resemblance is real. But it is also incomplete—for, as reported by Johns, the story is not merely one of decreasing numbers and increasing density. It is also about the genesis of what appears to be a more-or-less distinctive pattern of settlement. In contrast to the area of Marsala, where both the "winners" and the "losers" of Roman-era rural consolidation were largely pre-Roman in origin, virtually none of those in the vicinity of Monreale were. Instead, Hellenistic sites seem simply to have vanished. If this disappearance was not simply illusory—and I do not think it was, for reasons which I have already indicated—it is surely an outlier.

#### 4. Salemi.

##### 4.1. Introduction.

Beginning in 1998, four seasons of regional survey were directed by Michael Kolb, of Northern Illinois University, in the Belice Valley catchment basin. The project, which was undertaken under the aegis of the Sicilian-Scandinavian Archaeological Project (SSAP) at Monte Polizzo, included both extensive and intensive survey components. An extensive survey was made of the approximately 150 km<sup>2</sup> modern municipal territory of Salemi.<sup>798</sup> This is a predominantly mountainous region with several isolated but fertile river valleys.<sup>799</sup> At present, it constitutes "un vasto territorio agricolo completamente disabitato, ma coltivato",<sup>800</sup> but it was not always thus. Archaeological research has established that, beginning in the Late Bronze Age, human habitation was concentrated on four regionally-

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796. Villae were characterized by "strutture imponenti costruite con tegole e cemento, con decorazione in marmo, pavimenti di mosaico, e con ceramiche fini, vetri, [e] oggetti in metallo": Johns 1992: 414.

797. Francovich & Hodges 2003.

798. During the 1998 field season: Kolb & Tusa 2001: 504, Fig. 3.

799. As described by Kolb 2007: 172.

800. Kolb & Vecchio 2003: 839.

prominent elevations, including Montagna Grande, Monte Polizzo, Cresta di Gallo,<sup>801</sup> and Monte Rose (on which modern Salemi stands).<sup>802</sup> These four elevations served as the foci of intensive surface survey work which, during three campaigns undertaken between 1998-2000, investigated some 25 km<sup>2</sup> in the Fosso della Collura—the river<sup>803</sup> valley separating Montagna Grande, to the north, from Monte Polizzo, to the south—and 8 km<sup>2</sup> around Cresta di Gallo. In 2003, MHS co-director Robert Schon (then of Stanford University) directed a fourth season of "near-surface" survey in a 150 x 50 m area on the western slope of the Monte Polizzo acropolis.<sup>804</sup>

#### 4.2. Methodological notes.

##### 4.2.1. Collection methodology.

In methodological terms, the intensive survey component of the project under discussion entailed the designation, and subsequent investigation, of a large number of plowed fields—as at MHS, the effective unit of analysis—located in the survey zone.<sup>805</sup> Field-walkers made "10-15 m sweeps"<sup>806</sup> therein, during which they collected all encountered materials,<sup>807</sup> including those located "off-site", for immediate processing. The latter entailed a division, on the basis of identification in the field, of "diagnostic" from "non-diagnostic" materials. The latter were sorted, on the basis of general chronology, and their numbers recorded. After this, it seems, they were left in the field. Diagnostic materials, meanwhile, were retained for more detailed study in the project laboratory.<sup>808</sup> Among other things, this included their entry in a Geographical Information System.<sup>809</sup>

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801. Or, alternatively, "Cresti di Gallo". Both variants appear in the only article (Kolb 2007) to mention this toponym. A third name for the hill, Collina di Mokarta, makes reference to the Late Bronze Age settlement located at its summit.

802. The Late Bronze Age (1250-1100 BCE) settlement of Mokarta (on which see n. 801) is to all appearances the oldest, and was followed, during the Iron Age (800-500 BCE), by the settlements of Monte Polizzo and Poggio Roccione (on the eastern peak of Montagna Grande). Owing to the continuity of its habitation, the beginning of settlement at Salemi is difficult to date, but test excavations show evidence for its frequentation by the middle of the seventh century BCE at least: Kolb 2007: 173.

803. Specifically, the Chinisia or Chuddia River (both names are in use). Following the usage of Kolb 2007: 173, I prefer the latter term in the discussion which follows.

804. Morris *et al.* 2004: 264-266. The survey is of methodological, if not substantial, interest (no materials were found pertaining to the period with which this thesis is concerned). 92 test pits were dug in the survey area, at 10 m intervals, and 12 liters of soil collected at each. Materials found therein were examined and interpreted, in a manner analogous to surface survey, as a proxy for human activity in the area in question.

805. Some 339 were walked during the first two seasons of the survey's activity: Kolb & Tusa 2001: 503.

806. Kolb & Tusa 2001: 503. It is unclear, on the basis of the surrounding discussion, whether "sweep" is here meant to be understood as synonymous with "field-walker spacing" or "length of transect". (The former, for what it is worth, seems more probable.)

807. Kolb (2007: 172) describes the "100% collection" of materials discovered in the areas designated for intensive survey.

808. Kolb & Tusa 2001: 503. The authors are explicit concerning the fact that diagnostic materials were retained, whereas, in respect of the non-diagnostic materials, they remark only that they were "counted in the field". The implication, I think, is that they were *not* retained.

809. Kolb & Tusa 2001: 503.

#### 4.2.2. Site characterization.

The collection of off-site materials, it appears, allowed for the characterization of a fuller range of site-types than are discussed by Fentress *et al.* at Contrada Mirabile. Unfortunately, however, these types are never enumerated in an exhaustive fashion. As such, we cannot be certain that the types identified by the Salemi project *as published* are comprehensive. These types are:<sup>810</sup>

1. Villa
2. Farm/fattoria
3. Necropolis/cemetery
4. Field area
5. Quarry
6. Kiln site

The criteria on the basis of which these site-types are characterized, like the types themselves, are nowhere set out in their fullness. Instead, they emerge from the authors' discussion of individual sites, the classification of which, in the terms given above, is typically explained with reference to one or more aspects of their archaeological, or more broadly physical, manifestation. In specific, the authors imply that the extent of a documented artifactual scatter is relevant to their process of site characterization.<sup>811</sup> Further distinctions are made with reference to a variety of different criteria. The project's "quarries" show evidence of extractive activity.<sup>812</sup> Elsewhere, the deciding factor seems to be the (relative?) quantity of different artifact types discovered at a given site. "Villas" present atypically large quantities of fineware; "farms/fattorie" display a "high degree of amphora [sic] and other coarsewares"<sup>813</sup>; and "field areas" are off-site loci of "moderately concentrated coarseware".<sup>814</sup>

In respect of the project's identified "necropoleis/cemeteries" and "kiln sites", meanwhile, we cannot be so succinct. The necessary attributes of a "kiln site", of which only passing mention is made,<sup>815</sup> can probably be guessed at, but they are

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810. The ad hoc presentation of the project site typology, as explained below, means that a list of the sort which follows must be assembled with reference to a series of definitions scattered throughout the published project literature. In specific, type numbers 1. and 2. ("villa", "farm/fattoria") are discussed, with specific reference to an articulated settlement at Contrada Mueli, at Kolb 2007: 183; 4. ("field area"), with reference to an Iron Age site to the south of Monte Polizzo, at Kolb 2007: 180; and 5. ("quarry"), with reference to Contrada Mueli, at Kolb 2007: 180. The definition of types 3. ("necropolis/cemetery") and 6. ("kiln site") is treated below.

811. So much, in any event, seems to be implicit in the identification, as "field areas", of "small...ceramic scatters" discovered in the Fosso della Collura and on the plateau to the south of Monte Polizzo: see n. 810. As in the provided example, the relationship is an apparently impressionistic, rather than (explicitly) quantitative one, however. For the specific content of these scatters, see below.

812. "Cut limestone blocks used from [sic] house construction at Monte Polizzo appears to come from" the quarry site identified on the western slopes of Montagna Grande: Kolb 2007: 180.

813. Kolb 2007: 183.

814. Kolb & Tusa 2001: 503.

815. "Two production areas have also been located, a stone quarry and a kiln": Kolb & Tusa 2001: 503.

never stated. Given that the kiln in question is dated to the Iron Age, however, this fact is minimally problematic for our purposes here. It is certainly less troublesome than the project's characterization of its "necropoleis/cemeteries", of which four date<sup>816</sup> to the period of this thesis' interest. Three of these necropoleis are identified on the basis of different (albeit not irreconcilable) archaeological features.<sup>817</sup> Nothing, meanwhile, is said concerning the fourth.<sup>818</sup>

#### 4.3. Results.

Grosso modo, survey results suggest "a relatively rapid expansion of rural settlement from the early Roman period (1st century BC and 1st century AD) to the Late Roman period (2nd-5th century AD)".<sup>819</sup> The process of development is most apparent in two areas in particular: the Fosso della Collura and the slopes of Cresta di Gallo.<sup>820</sup> A discussion of the former will suffice to illustrate the relevant dynamics.

At Contrada Mueli, on the western edge of the Fosso della Collura, an area of early Roman settlement appears to become larger and simultaneously more complex.<sup>821</sup> The number of discrete ceramic scatters—three for the early Roman period, ten for the late Roman—more than triples, and their average extent—previously about 1 Ha, later well over this figure—grows as well. The composition of these scatters, furthermore, becomes more obviously heterogeneous, leading Kolb and his collaborators to posit the association of a villa, a quarry, and several farms or fattorie,<sup>822</sup> the use of which probably continued into the seventh century. In contradistinction to the phenomenon observed at e.g. Contrada Mirabile, however, this concentration of settlement does not seem to have entailed a commensurate abandonment of alternative places of activity. On the contrary, the period witnessed a concurrent multiplication of identifiable sites, as for example on the southern banks of the Chuddia river. To Kolb *et al.*, "[t]his suggests an expansion of the settlement hierarchy into more arid or less watered northern slopes of Monte Polizzo".<sup>823</sup>

To all appearances, furthermore, the settlement pattern established during the late Roman period remained stable during the subsequent centuries of Byzantine administration.<sup>824</sup> If so, it would seem that, for the centuries of interest to this thesis,

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Both, as indicated in Kolb & Tusa 2001: 504, Fig. 3, may be associated with the Early Iron Age habitation of Monte Polizzo.

816. Unsurprisingly, the most significant fossil guides for the period are ceramic. As at Contrada Mirabile (n. 712), these consist primarily in ARS And late African amphorae (especially types Keay 61 and 62). They also, however, include examples of the (decidedly less-local) LRA 1 and 2, both of which were produced in the eastern Mediterranean.

817. To wit, at Ardigna, in the Fosso della Collura, where surveyors noted the remains of "tombe a cassa costituite da lastre di calcare"; at Vaniddotti, to the southwest of Cresta di Gallo, "da cui è stata raccolta una brocchetta frammentaria, simile nella morfologia...ad un tipo di *olpe*...diffusa, in molte varianti, nelle necropoli tardontiche in Sicilia"; and at Baglio Capofeto, some 8 km to the northwest of Vaniddotti, where similar vessels were found: Kolb & Vecchio 2003: 841-843.

818. I.e., at the articulated site of Conceria, on the northeastern slope of Cresta di Gallo: Kolb 2007: 184.

819. Kolb 2007: 183.

820. Kolb & Vecchio 2003: 840.

821. Kolb 2007: 183.

822. Viz., per the terms discussed in Section II.4.2.2.

823. Kolb 2007: 184.

824. "il modello insediamentale, nella totalità dei casi, si sovrappone a quello tardo-imperiale": Kolb &

the area of Salemi witnessed a trend toward the *complexification* of regional settlement patterning; but not, insofar as concerns the largest sites, toward discontinuity.

#### 4.4. Evaluation.

At least in comparison with the survey at Contrada Mirabile, which, by reason of its (adjacent) geography and (basically similar) topography, constitutes an obvious comparandum for the work done by MHS, one might reasonably wonder why I have selected the Salemi project for consideration in this chapter. Notwithstanding their obvious topographical dissimilarities, however—low and flat, in the area investigated by MHS; high and hilly, in the zone studied by Kolb and his collaborators—there is a plausible geographical logic at work. The varied relief which characterizes the area of modern Salemi, is, to be sure, *unlike* that of the coastal plains which comprise the majority of the MHS survey universe. But it *like* that of the hilly region which begins at our zone's eastern edge, and as such, is useful for suggesting some of the variety of ways in which inland hilltop settlement—as documented, for example, at Marcanzotta and (more impressively) Genna—developed during this thesis' period of concern. The theoretical applicability of such insights is furthermore strengthened by the fact that the Salemi survey zone, unlike that of Fentress *et al.*, is located at approximately the same latitude as the majority of the areas surveyed by MHS. The latter, as explained elsewhere,<sup>825</sup> occupy a series of points along an imaginary axis extending from the coast (and more specifically Mozia) inland. A consideration of the areas surveyed by Kolb allows us to extend that axis further still. Moreover, it is worth noting the ways in which the Salemi survey methodology is comparable to that employed by MHS. The mix of extensive and intensive methodologies, and the preference for total (i.e., including off-site) collection are important points of similarity. There is no a priori reason, of course, to suspect that our findings should be the same; but it is at least plausible that they *could* be.

All that said, we must be cognizant of the ways in which a comparison with Salemi project results, while theoretically valuable, is in practice a little fraught. The problem, as intimated above, involves the project's classification and characterization of identified sites. The failure of the project directors to articulate an explicit site typology—and, more to the point, the criteria on the basis of which their classifications are made—poses a two-fold problem for purposes of comparison. Absent apposite commentary—as appears, for example, concerning the quarry at Contrada Mueli, but is lacking for the quarry identified among the installations at Conceria<sup>826</sup>—it is difficult to assess the plausibility of particular site-type identifications. The second problem stems from the fact that, when such commentary *does* appear, its content is frequently inconsistent.<sup>827</sup> In other words, the relationship

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Vecchio 2003: 843.

825. See Chapter 4, Section I.

826. See n. 818.

827. Descriptions of the necropoleis identified by the project vary tremendously. The Bronze Age grave groups at Mokarta are discussed in detail, including with respect to tomb typology (Kolb 2007: 184@178–179), while the Iron Age cemetery on the southern slope of Monte Polizzo is described only in



between a site as characterized, and its specific surface manifestation, may be opaque, changeable, or both.

Under the circumstances, an assessment of the validity of of Salemi site-type classifications, and more pertinently their applicability for other survey areas, is difficult. We may hope that a fuller (and more explicit!) publication of project data will someday rectify the situation, but in the interim, we are not without some analytical possibilities. Provided, for the sake of argument, we accept their site classifications as valid, it is unnecessary—in contrast, that is, to the situation at Contrada Mirabile—to question the details of the Salemi project directors' reconstruction of local settlement pattern development. This is because, again in contrast to the situation at Contrada Mirabile, the site-types discussed by the project are uniformly *heuristic*, rather than simply operational, in character. This fact means that the characterization of the project's identified sites—and perhaps, if not perforce, the relationship(s) between them—may be taken at face value.<sup>828</sup> It may not always be clear, as we have observed, *why* a necropolis has been characterized as such. But if we are willing to trust Kolb and his collaborators, we may assume that it was, in fact, a necropolis.

Provided, then, that we accept the authors' reconstruction, we may subsequently ask: what are the dynamics at work here? First, it is interesting to note that, in the area of Salemi, as at Contrada Mirabile to the southwest, the second century was a moment of significant development. The particulars may differ—here, as noted, settlements multiply, whereas at Contrada Mirabile, they disappear—but the consistency of timing is conspicuous. It would be worth investigating whether a similar chronology of change obtains in the area under study by MHS. Second, assuming we accept the (historically plausible) notion that Roman control of Sicily militated toward the expansion of agriculture, both in absolute terms and as a sector of the insular economy, observations made in the Salemi region suggest that there were various ways in which this could be achieved. One model, which may be compatible with observations made at Contrada Mirabile,<sup>829</sup> consists in an emptying of the countryside and its inhabitants resettlement in a reduced number of more concentrated (but still rural) population centers. Developments in the area of Salemi suggest the possibility of another: to wit, the proliferation of smallholdings, if not in lieu of, then alongside more significant rural settlements. In specific terms, I am skeptical of Fentress *et al.*'s explanation of Contrada Mirabile settlement history as a function of several broadly societal—and, in view of long-running debates on the character of late Roman landholding in Sicily, specifically tenurial—dynamics, but their mode of argumentation is fundamentally sound. It stands to reason that some link did, in fact, exist, between archaeological phenomena and social currents. If so, however, it follows that the obviously different patterns observed in the area of Salemi should correspond with different socio-economic dynamics. The latter

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terms of the extent of its associated artifact scatter (p. 180). The Roman period cemetery at Conceria does not even receive this abbreviated sort of treatment: it is described simply as "large" (p. 184).

828. On the other hand, it is also probably the reason for the project's lack of typological transparency; it is much easier to stipulate a priori criteria for site-types which are *also* defined beforehand.

829. And, it is worth noting, with the modern situation in the area of Marsala itself (see discussion in Chapter 3, Section II).

possibility should incline us to question the universal validity of the dominant narrative concerning the consolidation of latifundia on the island.

Third, and finally, the project provides us with a compelling reason to suspect that overland transport could be relatively well-developed. This is not because Kolb *et al.*'s findings add much to our knowledge of the (archaeologically, and frequently textually, invisible<sup>830</sup>) Roman-era Sicilian road network, *per se*, but rather because they render a minimalist vision of that network untenable. Absent such a system—inland!—the observed complexification of settlement patterning would not have been possible.<sup>831</sup> And imported goods—especially, but notably not exclusively, African ceramics—would never have achieved their documented ubiquity.

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830. See Chapter 4, Section III.3.4.

831. "[I]nfine, esistono strutture isolate che, tuttavia, appaiono sempre in stretta associazione con viabilità primaria o secondaria": Kolb & Vecchio 2003: 843.

## 5. Segesta.

### 5.1. Introduction.

Between 1995-1999, a systematic survey was undertaken in the region of Calatafimi-Segesta. The so-called "Carta Archeologica di Calatafimi", which since its origin has grown to include scholars from a range of Italian universities and research

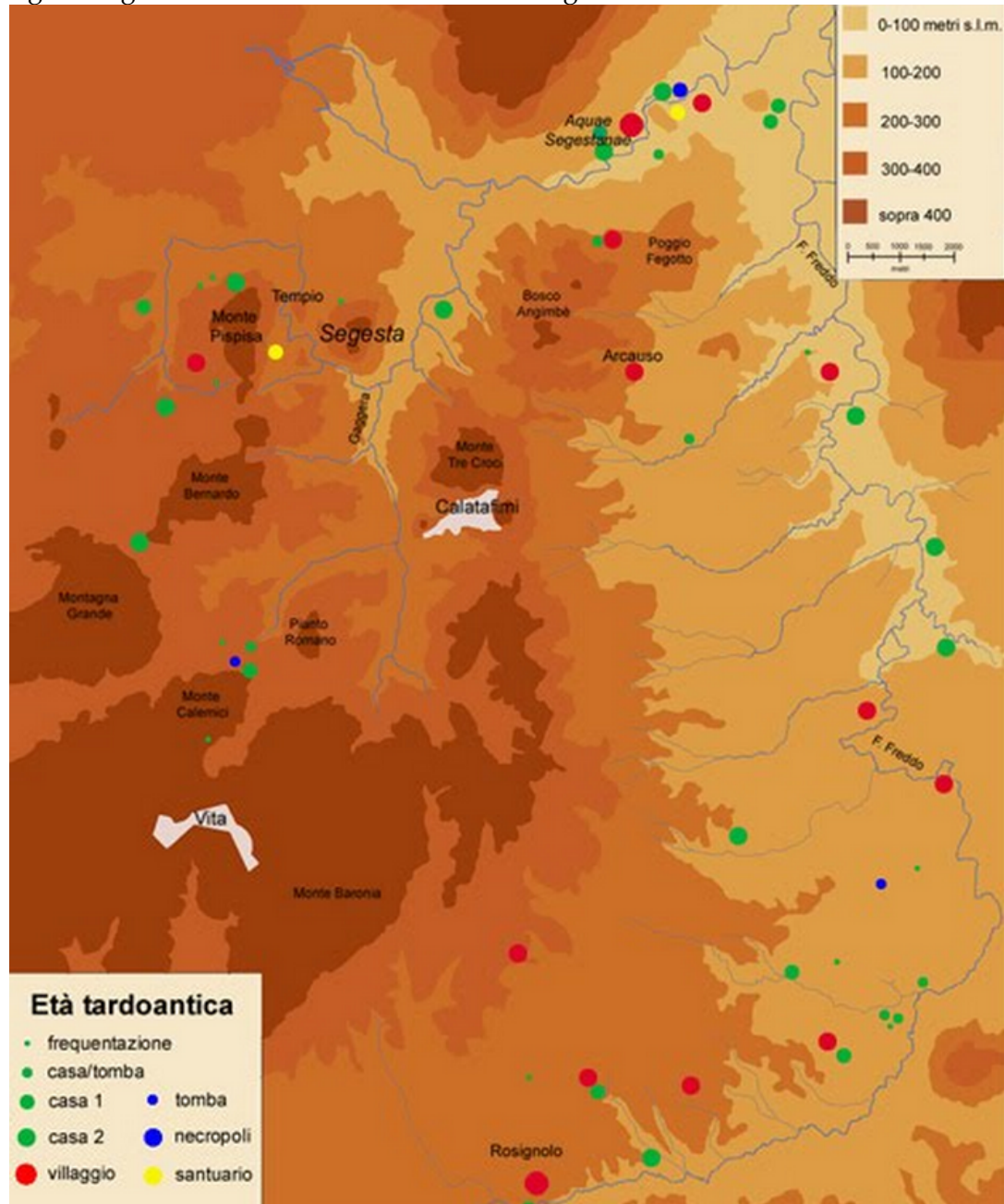


Fig. 49: Late Antique sites in the Segesta survey zone.<sup>832</sup>

832. From <https://sites.google.com/a/unisi.it/segesta/Home/15-la-tarda-antichita-iv-vii-secolo-d-c/il-paesaggio-tardoantico> [accessed 23 July, 2012].

institutions,<sup>833</sup> was organized in response to the wide range of problems and possibilities posed by the previous decade of archaeological research in the area. The 1980s and early 1990s had witnessed substantial excavation at Segesta and several other nearby hilltop settlements, one result of which was to underline the value of the region's archaeological patrimony. The Carta Archeologica project was intended, in the first instance, to document such resources, and in the second, to provide a regional context within which data obtained at Segesta and its neighbors might be understood.

To this end, three seasons (1995-1997) of regional survey were done in the territory pertaining to the modern comune of Calatafimi-Segesta.<sup>834</sup> Like Salemi to its west, the area is a topographically varied one, and includes, besides the prominence (Monte Barbaro) on which the ruins of Segesta are located, a number of other elevations, both smaller and larger; two fertile river valleys (through which run the Freddo and Gaggera, or Caldo, Rivers); a large forest (the bosco Angimbè); and a hilly "spine" running NE-SW through the modern city of Calatafimi itself. During the three seasons of its activity, the project intensively surveyed part of all these regions. Some 80 km<sup>2</sup>, or approximately 52% of the territory's 155 km<sup>2</sup> area, have been investigated to date.

## 5.2. Methodological notes.

### 5.2.1. Collection methodology.

In keeping with the project's interest in documenting areas of human "frequentation",<sup>835</sup> in addition to places of stable habitation or (more broadly) activity, groups of three to four field-walkers were tasked with collecting the totality of both on- and off-site material encountered in each surveyed area.<sup>836</sup>

### 5.2.2. Site characterization.

On the basis of three years' work in the field, project directors established an explicit site typology comprising seven classes of site:

1. Frequentazione
2. Casa 1
3. Casa 2
4. Villaggio
5. Casa/tomba

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833. See, for details, Bernardini *et al.* 2000: 125, n.1.

834. As of 1999, the comune's full, formal name. "Calatafimi", the shorter form which appears in the project's name, remains more frequent.

835. I.e., "frequentazione", as provided for in the project site typology; see "Site characterization", below.

836. As subdivided according to modern field boundaries, which served to delineate individual units of analysis. So much, in any event, seems to be implied by remarks on the project website (<https://sites.google.com/a/unisi.it/segesta/Home/1-come-la-ricerca-e-stata-fatta-1> [accessed 13 July, 2012]): "Nella fase pratica del lavoro, gruppi di tre o quattro persone percorrono le campagne in modo sistematico, campo per campo, scrutando attentamente il terreno alla ricerca di reperti archeologici superficiali."

## 6. Tomba

## 7. Necropoli

the respective characteristics of which are summarized in the following table:<sup>837</sup>

Type	Scatter size	Building materials	Characteristic elements	Chronology	Activities	Status <sup>838</sup>	Location
<b>Frequentazione</b>	Not calculable	None	Few - very few; ceramic sherds	Any <sup>839</sup>	Human activity outside the settlement (manuring)	— <sup>840</sup>	—
<b>Casa 1</b>	From 10 x 10 to 20 x 20 m	Bricks, limestone fragments, stone, river pebbles	Infrequent luxury/imported goods; Greco-Italic and Punic amphorae; black glaze; common wares (basins with hanging lip)	IV - I s. a.C.	Numerous loom weights. Widespread pastoralism, consumption of meat, production of wool	Peasant family	Vicinity of Segesta
<b>Casa 2</b>	From 20 x 20 to 40 x 40 m	Plaster fragments, architectural elements, opus signinum	Imported ceramics, table wares, amphorae	IV a.C. - I s. d.C.	Specialized agriculture (wine, oil)	<i>Epaulis</i> . Medium[-scale] property	Terme Segestane, Poggio Fegotto, Fiume Freddo
<b>Villaggio</b>	From 50 x 100 to 200 x 200 m	Bricks, limestone fragments, stone, river pebbles	Few manufactured goods, these being generally found in patches on the ground	VI a.C. - VII s. d.C.	Cerealiculture, sheep farming	<i>Pagus/Vicus/Statio/Mansio</i>	Lontani da Segesta
<b>Casa/tomba</b>	—	Bricks (occasionally)	Ceramic (very little)	Any	—	—	All over
<b>Tomba</b>	From 5 x 5 to 10 x 10 m	Cover-slab fragments	Human bones, lamps, unguentaria	Any	—	Various	All over
<b>Necropoli</b>	100 x 100 m	Tile or ceramic scatters, dark-stained earth	Burned ceramics, human bone fragments, ashes	Any	—	Various	All over

Table 3: Project site typology (adapted from Cambi 2005).

Only the first three of these attributes—"scatter size", "building materials", and "characteristic elements"—can really be described as "criteria" for the assignation of a site "x" to one of the seven available categories. The latter four, meanwhile, are better described as "observations" (thus "location" and, plausibly,<sup>841</sup> "chronology") or

837. From Cambi 2005: 630. (The same figure may also be found on the project website at <https://sites.google.com/a/unisi.it/segesta/Home/2--la-interpretazione-dei-siti-archeologici> [accessed 13 July, 2011].) In the interest of transparency, the version provided herein retains the Italian nomenclature. For ease of reference, however, I have translated all associated information.

838. For "rango".

839. Lit. "always", for "sempre".

840. Cells thus marked are blank in the original.

841. But not necessarily; the delimitation of a site's chronology is equally, if not better, described as an act of interpretation, since it entails both an assessment of the available materials susceptible to dating and a (too-frequently unstated) understanding of what sorts of activity merit characterization as "use"

"interpretations" ("activities" and "status"). Implicit in the inclusion of the latter four categories in the project's site typology—and more to the point, the conviction that they vary in function of defined site-type—is the notion that this taxonomy is heuristically, as well as operationally, useful. Whether or not this is so is a question I mean to take up a little further on. In the meantime, however, it is worth noting that, in either event, it is usefully transparent concerning the project director's assumptions.

### 5.3. Results.

The project documented 475 sites within the 80 km<sup>2</sup> explored by survey participants, leading, by simple arithmetic, to an observed site density of c. 6 sites per square kilometer.<sup>842</sup> According to the project directors, some 70% of the documented sites consisted in "insediamenti stanziali", while the remaining 30% were attributed to "pure e semplici frequentazioni (per lo più tracce di antiche coltivazioni o di antiche discariche di rifiuti)".<sup>843</sup>

Insofar as they demonstrate the significance, and moreover the longevity, of settlement in the region of Segesta, these are useful numbers. But they are also a little misleading, particularly during the centuries of this thesis' interest. Among the developments documented by the survey was a tendency toward the concentration of habitation at a reduced number of larger sites in the countryside. The beginning of this process, it appears, may be dated to the second half of the second—beginning of the first century BCE, when a thitherto-dispersed pattern of rural settlement—comprising more than 200 sites, of which a notable portion were modest places of the sort characterized as "casa 1", above—underwent significant change.<sup>844</sup> By the beginning of the Augustan period, the number of inhabited sites had fallen precipitously. Those which disappeared were disproportionately of the modest type just mentioned.<sup>845</sup> Those which remained, in a reduced number of the areas which had previously been inhabited,<sup>846</sup> belonged overwhelmingly to the "villaggio" and "casa 2" types.

The "polarizzazione"<sup>847</sup> of rural settlement appears to have continued right down into the Late Antique phase<sup>848</sup> of the region's history, by which time most of

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for the purpose of defining a use-life.

842. Bernardini *et al.* 2000: 91.

843. Bernardini *et al.* 2000: 91-92. Given the apparent identity of the latter group and the class of sites defined, in the table above, as "frequentazione", it would stand to reason that the former—"insediamenti stanziali"—should encompass the remaining six, but this is nowhere actually stated.

844. Bernardini *et al.* 2000: 98-105.

845. Cambi 2003: 158.

846. In specific, "i dintorni del monte Pispisa; Ponte Bagni-aquae Segestanae; Punta [i.e., Poggio] Fegotto; Contrada Arcauso; [ed] il settore interno della valle del fiume Freddo". Among the areas abandoned, meanwhile, were the slopes of the Segestan acropolis; the valley of modern Contrada Sasi; and the southernmost reaches of the Freddo River valley: Cambi 2005: 627-628.

847. Cambi 2005, *passim*.

848. The chronological terms employed in the publication of project findings are not entirely consistent. Bernardini *et al.* 2000: 115, for example, refer to the "tarda età imperiale" (which, per the apposite figure (2000: tav. XXIV), comprises the mid-fourth–mid-fifth centuries), but the two most recent publications (Cambi 2005; Molinari & Neri 2004) prefer "[la] Tarda Antichità" (which, per the caption of Cambi 2005: 634, Fig. 9, extends from the fourth - sixth centuries.

the documented evidence for settlement was to be found in basically two areas. The first, at Ponte Bagni in the north of the survey zone, is in some respects illustrative of the continuity which characterized the region's largest settlements. Like virtually all of the villages inhabited in this period, the settlement at Ponte Bagni was already several hundred years old<sup>849</sup> by the time of its florescence in the mid-fourth century. It was at this point, Molinari and Neri indicate, that the settlement "giunse ad articolarsi in numerosi edifici situati ai due lati della strada".<sup>850</sup> In the authors' telling, the reasons for its prosperity were largely commercial. Not without reason,<sup>851</sup> they identify the site as the "Aquae Segestanae" named in the *Antonine Itinerary* (91.2). This, they hold, constituted a *statio* on the *Cursus publicus*,<sup>852</sup> and as such, a natural place for the collection and exchange of local agricultural produce.

The second major area of Late Antique settlement, meanwhile, developed in the area of modern Contrada Rosignolo, near the southern edge of the surveyed area (as indeed the territory of Calatafimi-Segesta). The latter was, if not unique,<sup>853</sup> then atypical in being founded at the beginning of the fourth century. Notwithstanding the afore-mentioned trend toward rural polarization, the birth of Contrada Rosignolo was not the only peculiarity of the period. For reasons which remain unclear, the fourth century witnessed a brief renaissance of site-types "casa 1" and "casa 2". While their numbers did not really change, overall, some which had previously been occupied were abandoned, and others, founded in places which had been uninhabited since the Hellenistic period.<sup>854</sup> Whatever the genesis of this phenomenon, it was short-lived. In the middle of the fifth century, all these smaller sites simultaneously, and to all appearances definitively, disappeared.

The polar sites which had grown up alongside them, meanwhile, proved more durable. The settlement at Contrada Rosignolo, which enjoyed a relatively shorter *floruit*, remained inhabited until the end of the seventh century. As in other parts of Sicily, the eighth-century disappearance of well-known imported ceramics poses an obstacle to the characterization of developments in the following period. What little we know, however,<sup>855</sup> suggests that the settlement at Ponte Bagni for

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849. Per Cambi 2005: 631, Fig. 4, the earliest components of the settlement—in specific, sites 220-229—date to the second century.

850. Molinari & Neri 2004: 117. The authors go on to posit that a bath complex was among these buildings.

851. Given, that is, the existence of hot springs in the immediate vicinity, which in the 1960s were developed into a spa bearing the name "Terme Segestane": <http://www.termesegestane.it/LaStoria.htm> [accessed 23 July, 2012]. That said, it is worth noting that the name was established at around the same time, and as such, cannot really be counted as toponymic evidence for an earlier such installation.

852. Molinari & Neri 2004: 116-117. Per a common, but to my mind somewhat problematic, interpretation of the *Antonine Itinerary*. The relevant section (*Ant It.* 90.6-93.1) simply presents itself as the "Item a Lilybeo per maritima loca Tindaridem".

853. Only a handful of the Late Antique settlements identified as "villaggi"—including the isolated site (n. 316) established near modern Stazione Alcamo in the fourth century—were recently founded: Cambi 2005: 631, Fig. 4.

854. I.a. in the area between fiumi Freddo and Caldo (sites SG 243, 267, 287, 288); around Monte Calemici (SG86); in the valley west of Monte Pispisa (SG 140); on the plain below Calathemet (SG284); and in the area of Contrada Canichiddeusi: Molinari & Neri 2004: 115.

855. Concerning, basically, eighth century slipper-shaped lamps and cooking vessels similar to types documented at Marettimo and Cefalù: Molinari & Neri 2004: 122, n. 27.



some time avoided a similar fate. Habitation is documented there for the eighth and possibly ninth centuries, and may actually have lasted longer still.<sup>856</sup> In either event, Ponte Bagni was one of the few sites to be inhabited during the tenth and eleventh centuries of the region's history. Only four or five sites were documented by the survey during this period, on the basis of which the project directors propose a notable demographic decline.<sup>857</sup>

#### 5.4. Evaluation.

From a geographical perspective, consideration of the Segesta survey makes about as much sense as our examination of Salemi, and for much the same reasons. Like the latter, it is a topographically-varied inland area which, in comparison with the region surveyed by MHS, is characterized by significantly higher elevation. If we accept the logic according to which Salemi is a sensible comparandum, then Segesta must also be considered as such. Indeed, their very proximity strengthens the case for both. Notwithstanding the difficulties entrained by their different site typologies, which makes a comparison of their results less than perfectly straightforward,<sup>858</sup> the two surveys describe what it is in essence a single large area.

How much more surprising, then, that their results should be so different. If we are to accept the project directors' reconstruction of local settlement history, Segesta was characterized by some different dynamics than were documented in the region of Salemi. During the centuries of interest to this thesis, both areas witnessed an increase in the number of densely-populated site-types. In the area of Salemi, this development paralleled an increase in the *absolute* number of attested sites, which multiplied beginning in the first century BCE and continuing throughout the fifth century CE.<sup>859</sup> In the area of Segesta, meanwhile, rural settlement did not merely grow more dense; it also became rarer, in terms of the number of documented sites. The ramifications of this difference are not fully appreciated by the project directors, whose interest in the results from Salemi is limited to what their projects have in common. The proliferation of relatively higher-density sites in both areas—as indeed elsewhere in Sicily<sup>860</sup>—is noteworthy, especially if, as Cambi argues, they represent the same sort of social as well as archaeological phenomenon. In specific, he argues that they are all, or mostly all,<sup>861</sup> "villaggi", in the sense (or more to the point, senses)

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856. The reappearance of known ceramic types in the middle of the tenth century finds part of the Ponte Bagni settlement inhabited, for which reason it seems possible that its occupation continued across the (archaeologically obscure) ninth–mid-tenth centuries: Molinari & Neri 2004: 123.

857. Molinari & Neri 2004: 119.

858. Albeit not impossible; indeed, Cambi (2005: Fig. 11) actually attempts to integrate the two projects' site descriptions using a common language.

859. I.e., encompassing the periods defined by the project as Early (first century BCE–first century CE) and Late Roman; see n. 819.

860. Cambi 2005: 635–637 also mentions the areas of Alcamo and Erice–Trapani.

861. The sole exception is a site (S-112) in the vicinity of Contrada Conceria which the project directors identify as a villa. In view of its extent (some 13.5 Ha), Cambi 2005: 636 wonders, "in via del tutto congetturale, si intende", whether it might better be characterized as a city, specifically the Halyciae known from ancient sources. The plausibility of his proposal is not a matter I mean to take up in this thesis. Instead, I would like to note how quickly he discards the site's original characterization. As near as I can tell, failing any explicit justification, this decision emerges from Cambi's (to my mind, idiosyncratic) belief in the insignificance of villae as a component of the Roman Sicilian landscape:

in which that word is used in the Segesta site typology.<sup>862</sup> They are the "grossi centri a cui facevano capo le unità cellulari minori affidati ai coloni, nell'ambito del modello organizzativo del latifondo di grande estensione".<sup>863</sup> Provided that we are willing to admit that this identity—of archaeological form and social valence—is universally, or at least regionally, valid,<sup>864</sup> the significance of Cambi's argument should be obvious. Both areas experienced a process whereby ever more of the rural population was being pulled into the orbit of the latifundium, which became the organizing principle for rural settlement as a whole.

On its own terms, this is perfectly reasonable. The problem, as I have stated, is that it is not *sufficient*. First, of course, because it entails the acceptance of some (plausible, but essentially unprovable) assumptions regarding the social ramifications of particular archaeological phenomena. This is, in some measure, a methodological problem, specifically of the project's interpretative apparatus. Such assumptions are encoded in the site typology (Table 3) depicted above, which, as we have already noted, unites without comment directly observable and extrapolated interpretative characteristics. Such identities may, indeed, be valid within the area of the Segesta survey, but there is less reason to believe they should hold true elsewhere. With specific respect to the area of *Salemi*, it is an especially dangerous assumption to make. As we have already noted, a significant part of the narrative is conspicuous for its absence from Cambi's analysis. The proliferation of small-holdings *alongside* the "villaggi" on which Cambi is focused is evidence that something else was going on.

Inasmuch as I have already assayed a characterization of the situation in the region of Salemi,<sup>865</sup> I will not rehearse it now; suffice it to say that the robust development of dispersed small-scale settlement is difficult to square with Cambi's vision of a landscape shaped by ever-increasing seigneurial power. Here, however, I am referring to another sort of difference. The diverse patterns of development observed in the areas of Salemi and Segesta, respectively, do not only reflect different power dynamics,<sup>866</sup> they correspond to different demographic trends. In the area of Salemi, it is difficult to escape the impression of a growing rural population, overall. A growth-neutral expansion of *either* of the two attested settlement paradigms can easily be envisioned, but not both at once. Absent an increase in absolute numbers, the enlargement of polar sites like Ponte Bagni and Contrada Rosignolo, and the expansion of dispersed small-scale habitation, are in fundamental tension with one another.

In comparison, the situation at Segesta is not so clear. The process of consolidation described in Section 5.3 seems, at first glance, to constitute what is at least potentially a growth-neutral scenario: the expansion of a limited number of

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Cambi 2003: 153–157.

862. Section II.5.2.2.

863. Cambi 2005: 635. The comment refers, in context, to the sites at Ponte Bagni and Contrada Rosignolo, but it is pretty clearly paradigmatic.

864. But see below.

865. See section II.4.4.

866. When not to say, of course, the range of characteristics—among them differences in agricultural regime—which are influenced by these dynamics, but are not germane to the present discussion.

polar sites at the expense of dispersed secondary- and especially tertiary-order settlement. A closer look complicates this picture somewhat. Plotting site types by century (Fig. 50) reveals that the disappearance of small-scale settlements, especially of those belonging to the "Casa 1" type, was largely accomplished previous to the period of our interest. Subsequent to the Augustan period, in fact, the *overall* number of sites does not significantly decline, at least until the end of the period of our interest.<sup>867</sup> The multiplication of "villaggi", meanwhile, is a feature of the area's Late Antique phase, with the largest gains shown during the fourth century.

The demographic implications of this apparent two-stage process, as we have already noted, are difficult to parse. By way of speculation, however, two solutions

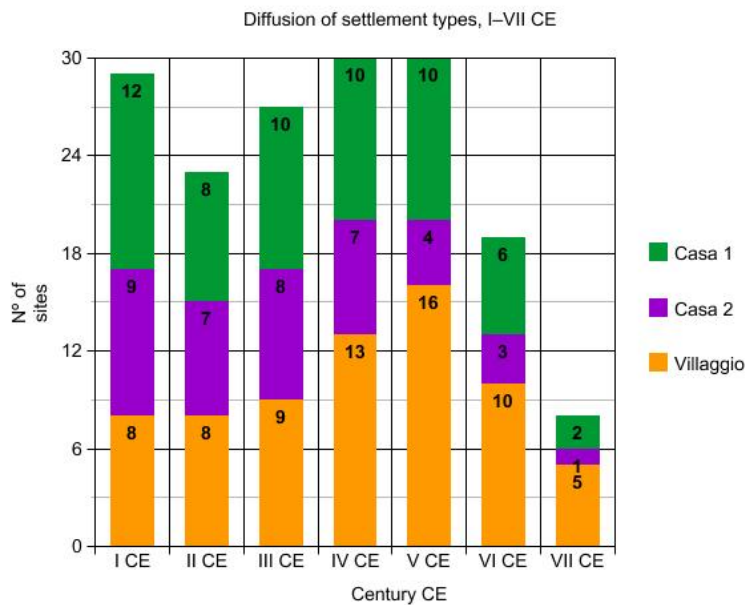


Fig. 50: Diffusion of settlement types, I–VII CE.

4 new village sites in the fourth century—is not so accompanied; the number of "casa 1" sites remains unchanged, and the number of "casa 2" sites only decreases by 1. That said, the increase attested in the *fifth* century—from 13 to 16 "villaggi"—is offset by a commensurate decrease in the number of "casa 2" sites. As such, we cannot dismiss the possibility of continued in-migration—or to split the difference, that both things occurred, in measures we are unequipped to specify.

### III. Discussion.

Speculations like those aired above furnish us with a variety of ways of thinking about the projects treated in this chapter. In this section, meanwhile, my objective is broad rather than deep: to develop the implicit (and, in a handful of places, explicit) comparison of these surveys to one another. As interpreted by their directors, these surveys' results provide us with a range of "histories" of Sicily in the Roman period. Bringing them into conversation with one another, meanwhile, offers the promise of a less parochial vision: if not of Sicily in its entirety, then, at least, of

seem plausible. First, it is possible that we are *not*, in fact, viewing a growth-neutral process. According to the logic deployed in our examination of settlement in the area of Salemi, an increase in the size and/or extent of regional polar sites should have entailed a significant reduction in the number of lower-order sites. The greatest single "bump", however—the appearance of

867. The Medieval period, as we have already noted (see previous section), witnessed a second, and much more pronounced, reduction in the number of sites of *all* types.

the western third of the island. To this end, I have prepared a visual aid to comparison. Fig. 51 is a representation of the developments recounted, in prose, in

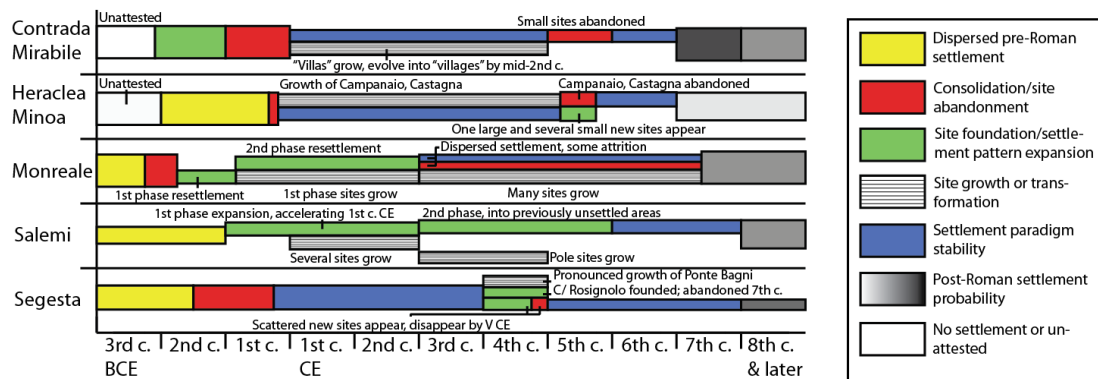


Fig. 51: Comparative Roman settlement histories.

my summary of each survey's results. Needless to say, it greatly simplifies the narratives on which it is based. Concerns regarding legibility necessitated the use of a limited range of colors, each of which depicts more than a single phenomenon. And a range of subsidiary phenomena—as for example a process of gradual attrition affecting a few members of an otherwise-stable settlement hierarchy<sup>868</sup>—are not specifically depicted. In these cases, I have typically supplied a brief disambiguating annotation.

Such asides, of course, cannot answer a more serious objection. The different methodological– and interpretative frameworks utilized by each project mean that settlement pattern "stability" might not everywhere signify the same thing. For our purposes here, however, it is less important that *each* phase be characterized in its fullness than that the *succession* of of phases is clear. Optimizing for the latter makes it easier to discern whether the several areas under study experienced broadly similar dynamics at more or less similar times.

### 1. Similarities and differences.

On the basis of the results to hand, it would appear that at least some of them did. The most immediately obvious similarities are located at the left– and right edges of the graph, which, correspond, respectively, to the beginning and end of the period of primary interest. Insofar as these are the moments which, owing to their (literal) marginality, are more loosely characterized than the centuries they bracket, it is possible that this similarity is exaggerated. Nevertheless, I do not think it is illusory, especially as regards the left edge. Save for at Heraclea Minoa, where the data are too sparse to know for sure, pre-Roman habitation in *all* these areas was more widely scattered than it would later come to be. It also seems to have been characterized by a flatter settlement hierarchy. In comparison with the Roman period, there are everywhere more small– and medium sites, and fewer larger.

With respect to the right side of the graph, the similarity is as or more likely to be a product of our ignorance than of contemporary conditions. The rudimentary

868. As documented e.g. at Monreale between the third–early seventh century; see apposite annotation in Fig. 51.

state of our knowledge concerning the productions characteristic of early Medieval Sicily make it difficult to identify activity pertaining to this period, let alone characterize it in very specific terms. That said, the impression we receive—viz., of a much-diminished density of settlement—probably contains a grain of truth. The latest projects discussed above (Salemi, Segesta), which by virtue of their recency have access to a comparatively greater body of ceramological data, still tend to show a decline in the frequency and/or density of settlement. A similar result also emerges from those earlier surveys which were supplemented by excavation (CM, HM). Notwithstanding scattered later (seventh century onward) surface remains, dateable *building* activity is all earlier. At the level of the site as well as at the level of the region, late Roman activity seems often to have been less intense.<sup>869</sup>

During the centuries of interest to this thesis, the situation is more varied. Of the five surveys represented in Fig. 51, three describe a basically similar trajectory; one is comparable, but more discrepant; and the last is quite different. The three most similar, in terms of the nature and timing of their constituent developments, Contrada Mirabile, Heraclea Minoa, and Segesta. All three exhibit:

1. A dispersed pattern of pre-Roman settlement.
2. A phase of consolidation, occurring between the second century BCE–early first century CE, during which many old sites were abandoned and others apparently grew.
3. A lengthy period of apparent settlement pattern stability, extending through the sixth– or seventh century and characterized by:
  1. Few new foundations;
  2. Few new abandonments;
  3. The continued growth of locally-significant sites.
4. Thereafter, an apparent involution of settlement (subject to the caveats already articulated), but not necessarily one which upends the order of things. The sites which display the strongest evidence for continued habitation past the period of interest are those which were already significant.

As will shortly be seen, they also exhibit some important differences. First however, we will consider the survey whose results I have characterized as comparable, but less obviously similar. This is Monreale, which participates in the first of the trends listed above, but does not experience either the second (consolidation) or the third (stability) in precisely the same way. With regard to the former, the number of sites does, indeed, fall, but there is no corresponding growth in any of the others: instead, pre-Roman occupation seems basically to collapse. The sites which *were* subsequently to grow belong to a settlement system which originated in the Republican period. This was also the period of its most rapid

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869. Provided, of course, that we accept a stable (positive) correlation between human presence and durable remains. On its face, this is by no means objectionable; indeed, it is a foundational principle of archaeology. But it may exclude the possibility of a qualitatively different habitation regime, in which settlements were more ephemeral; more transient; or both.

development, which was characterized by the expansion of settlement throughout the region, but it was not only phase in which changes occurred. The centuries of "stability", in the sense used with regard to Contrada Mirabile, Heraclea Minoa, and Segesta, were in the area of Monreale also a time for consolidation. By the time of the later Roman empire, the disappearance of many smaller sites, and the growth of several of the larger, had produced a noticeably different pattern of habitation.

These differences, however, are still less than may be observed in the case of Salemi. In contrast to the other areas considered here, the reduction in site numbers which was elsewhere occasioned by the inauguration of Roman rule never occurred. Instead, the transition saw the appearance of new places of habitation. This development, moreover, was repeated during the third–fifth centuries, when settlement expanded into entirely new areas. It is true that this phase also witnessed some of the processes associated with what we have called consolidation elsewhere. Especially during the second phase of expansion, some sites did expand—per the directors, into villages—and overall, the degree of settlement clustering appears to increase. But these trends occurred in the context of regional expansion, rather than constituting the most significant processes of the day.

## 2.Divergence.

Their value notwithstanding, questions of global similarity and difference do not exhaust the insights which may be gleaned from Fig. 51. The graph also allows us to determine whether things became more or less similar over time; in short, whether there was a perceptible convergence or divergence of regional narratives. On the strength of the evidence to hand, it seems that the answer is yes: a divergence occurred. Individual survey area trajectories are more different later on. The most significant differences between the three surveys characterized as similar (CM, HM, Segesta) take place in the fourth–fifth centuries. In the area of Contrada Mirabile, this is a moment without notable innovations. The same cannot be said for Segesta and Heraclea Minoa. During the fourth century, Segesta saw the foundation of several new settlements, the majority of which disappeared shortly thereafter, and a new pole site, Contrada Rossignolo, which survived until the end of the period of this thesis. During the fifth century, Heraclea Minoa witnessed a superficially similar phenomenon. A handful of new settlements appear at this point—including, most notably, a new pole site—but others also disappear.

With respect to the two outliers, Monreale and Salemi, the story is also one of divergence. The former continued its ongoing process of settlement consolidation and clustering, while the latter, we have seen, was expanding into new terrain.

## 3.Intimations of a pattern.

More could probably be done with Fig. 51, but it is as important to note that there are questions which it *cannot* answer. Chief among these is whether all this variety, to put it bluntly, makes *sense*. Can the similarities and differences we have noted be mapped onto any set of characteristics, the invocation of which might serve as a (partial) explanation for the patterns we see? The answer, I think, must be a cautious yes, and not merely because the range of possible "characteristics" is so wide as basically preclude a definitive response in the negative. On the contrary, we

already have evidence for the influence of external factors. The divergence noted above speaks to a gradual weakening of centralizing factor(s), and, contrary-wise, the assertion of others which were more limited in their remit. Before exploring those factors, however, it is worth returning to the survey which is the real subject of this thesis.



## CHAPTER 6. CONCLUSIONS

## I. A vignette: extra-Sicilian trade and local patterns of activity.

To what degree can developing patterns of settlement, as characterized in the conclusions to Chapter 4, be related to broader trends in Sicilian history and changes in land use? In at least one respect, the question is one we have already broached, specifically regarding changes in the global ARS supply and their effect on the local ceramic register. In general, however, we have been more focused on the synthesis of our data—and, where possible, its interpretation; thus e.g. the characterization of the remains associated with PI as a farm—than in its explanation. Explanation, meanwhile, is my aim in this section.

In this vein, it is useful to recall the observation with which we concluded Chapter 4: the preeminence enjoyed by Genna and San Leonardo depended, at least in part, on their proximity to two of the region's main roads.<sup>870</sup> The relationship implied between the road system and the size and location of local settlement remains to be demonstrated for other parts of the region, but there is good reason to expect it to hold. Given the ubiquity of imported wares throughout the survey area—which phenomenon almost inescapably implies the existence of a relatively well-developed terrestrial transport infrastructure—it is likely that fuller information would strengthen the association proposed.

The more significant point, however, is not that the relationship between local roads and settlement patterns could be stronger; it is that other factors, at least when considered in isolation, were apparently so *weak*. Notwithstanding the project directors' expectations, the relationship between proximity to the coast<sup>871</sup> and settlement distribution is ambiguous, or at least changeable over time (a topic to which we will shortly return). And it is unclear whether even *this* much can be said for the influence of the only other notable hydrological feature in the vicinity. The data are insufficient to demonstrate whether the Birgi River<sup>872</sup> played any very significant role in determining the location of settlement, insofar as it is attested by MHS. This is not to say that its presence was gratuitous; the local climate is such that a perennial water source would undoubtedly have represented an important resource. But neither are we faced with a situation like that which obtained, most famously, in Egypt, where the Nile constituted the locus of essentially all stable settlement.

What is more, it is difficult to argue that the Birgi's advantages for agriculture were *dispositive*. Were a perennial source of freshwater a *sine qua non* for settlement,

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870. Notwithstanding the fact that it is impossible, at present, to calculate the distance which separated the former site from its nearby artery: see Chapter 4, Section III.3.4.

871. Viz., of the Stagnone, rather than the Mediterranean proper, in the area which was actually surveyed. It is possible, if not especially easy to prove, that proximity to a stretch of the coast bordering the *sea* might have provided a stronger impetus to proximate settlement. That said, there is at least one reason to suspect that its influence might not have significantly greater. The stretch of coast between Lilybaeum's harbors, to the south, and Trapani's, to the north, seems to have been essentially devoid of accessible natural landing sites: Maurici 2005: 73–84 (with Fig. IV.1).

872. Or, as it is known in the vicinity of Borso, the Chinisia. For the river's nomenclature, see Chapter 1, n. 7.

we would not expect to see San Leonardo have become so prominent. From an agricultural perspective, the latter's disadvantages were not even limited to the salinity of the nearby Stagnone. The present fertility of the coastal plains on which San Leonardo is located is a modern phenomenon.<sup>873</sup> During the centuries of our interest, the area was a shifting expanse of dunes and marshes. It was, in other words, the sort of place which might have been used for pasture;<sup>874</sup> but it was far from being prime farmland.

It is similarly difficult to establish an unambiguous relationship between settlement and topography (in the restricted sense of elevation and slope) in the area of study.<sup>875</sup> From one perspective, to be sure, this result is unremarkable. As we have several times noted,<sup>876</sup> the local topography is mostly notable for its low and gentle relief. Given such broad homogeneity, we would not necessarily expect it to have been a decisive factor in the location of settlement. That said, the apparently-modest influence of topography on local settlement patterns was not simply foreordained. It also reflected the course of local history, specifically in respect of its insulation from conflict. For most of the period under discussion, the hinterland of Marsala (as indeed Sicily in general) was spared the sorts of dangers which, in many other parts of the empire, inspired the local population to relocate to higher, less accessible, and presumably more defensible parts.<sup>877</sup> To the degree that such places *existed*, in the area under study—primarily at its eastern edge, in the rolling hills beginning inland of Genna—there was apt to be much less driving people there.

At this point, it might reasonably be wondered: what gain is there in reviewing our arguments for the apparent modesty of such factors' influence on local patterns of settlement? The argument for their relative insignificance has already been made, in greater detail, in Chapter 4. Here, however, the point is not simply that Roman-period settlement seems, at best, to have been *inconsistently* influenced by all these factors. It is that it was *inconsistently* influenced by *all* these factors, which comprise some of the most basic aspects of the natural landscape.<sup>878</sup> The same, meanwhile, cannot be said for the road system, the anthropogenic character of which is not in doubt.

More to the point, the reasons for its use during our period are not in doubt, either. As we have observed elsewhere, the local Roman road system was not, in the main, of Roman construction.<sup>879</sup> On the contrary, much of it predated their control of the island. As such, it stands to reason, it also responded to pre-Roman exigencies, among which was surely to provide for the intra-regional circulation of people and

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873. As explained in Chapter 1, Section II.1.

874. Thus Maurici 2005: 23.

875. Nor even, I think, a diachronically-stable one, for reasons we will discuss further on.

876. Chapter 4, *passim*.

877. *Viz.*, the phenomenon frequently described as "incastellamento", which Molinari 2002: 326 was indeed atypical of western Sicily during much of the period under discussion.

878. By which I mean, essentially, prior to human intervention, or more realistically the sort of radical intervention made possible by modern technology. (The straightening of the Birgi River's mouth—on which see Chapter 1, Section II.1—and the increasingly frequent employment of powered plows, are examples of the sort of change I mean.)

879. See Chapter 4, n. 270. Much the same could be said for the island as a whole.

goods. In this regard, the road system has something in common with the hydrological and topographic features considered above. Like them, it was primarily of interest to (if not necessarily for the exclusive use of<sup>880</sup>) the inhabitants of the region it served to connect. With the advent of Roman power, however, the local road system underwent a change in its fundamental character. This is not to say that a physical transformation occurred; as just noted, Sicily was unusual among Rome's provinces for the modesty of the changes the latter made to local transport infrastructure. But the region's roads no longer *meant* the same thing. Once Sicily was absorbed into Rome's orbit, the road between e.g. San Leonardo and Lilybaeum didn't serve merely to connect the former site with the latter. It also made a connection between San Leonardo and *Rome*. The latter's representatives were headquartered in the old Punic capital, and the duties it extracted from the local population were shipped from Lilybetan ports.<sup>881</sup> The local road system, in other words, was made to serve other than local ends.

### 1. Local roads, Roman interests.

It will probably always be impossible to tell what proportion of local traffic was inspired by Roman imperial, rather than local, needs: we simply know too little concerning the roads by which both were served, and the quantity of traffic they supported. Nevertheless, there are indications that the former was significant, and tended to increase. As we observed at the outset of this section, the archaeological register is rich—in variety, if not always number—in ceramics imported from elsewhere in the Roman world. Early in the period of our interest, these include a limited quantity of amphorae from other parts of the expanding Roman periphery (France and Spain). A greater number, meanwhile, are from the empire's Peninsular Italian heartland, including a variety of amphorae; a range of forms in TSI; and even, it seems, a small quantity of Pompeian Red cooking wares.<sup>882</sup> In the first–second century, however, the floodgates open. Massive quantities of North African amphorae; cooking– and common wares; and ARS are attested throughout the surveyed region, providing eloquent witness to the intensification of trade with Sicily's southern neighbor.

From Rome's perspective, the significance of the African trade was not primarily a matter of table wares. It was a question of its particular role vis-à-vis the capital. As explained elsewhere in this thesis,<sup>883</sup> the assignation of Egyptian corn to Constantinople inspired Rome to look to North Africa for the provisioning of the

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880. Lest I be misunderstood, this is not to imply that the hinterland of Marsala was untouched by intra-regional, or even extra-Sicilian trade, or that the local road system played no role in facilitating it. But the scale of the phenomenon, and to all appearances its nature, was radically different than that which developed following Sicily's fall into Roman hands.

881. "Il porto, o meglio il sistema portuale, strategicamente più rilevante e commercialmente più attivo dell'intera Sicilia occidentale per tutta l'età tardo romana e bizantina...continuò a essere quello di Lilibeo": Maurici 2005: 74. The development of Trapani and Mazara as significant regional ports was a later phenomenon, albeit one which began, in the case of Trapani, during the period of Lilybaeum's preeminence. For the development of Mazara del Vallo as a maritime point of reference, see n. 886.

882. On these productions, see Chapter 4, *passim*.

883. Chapter 2, Section II.1.3.

western capital. The North African provinces' new annonary role had a massively expansionary effect on agricultural production there.<sup>884</sup> And the effort to get North African produce to Rome drove an equally-massive increase in the volume of trade with the capital, frequently via the western coast of Sicily.<sup>885</sup> During the period of interest to this thesis, that meant Marsala.<sup>886</sup>

The local repercussions of this trade are difficult to overstate. By way of example, it is worth considering the effects of the trade in ARS. North African table wares were more than simply another ceramic: they were the death of an industry. An local production of fine table ware, the characteristics of which recall the "thin-walled" wares widespread during the Late Republican–early Imperial period, appears to have been displaced by the introduction of Italian– and especially African competitors.<sup>887</sup> To put the matter differently: the historical significance of the region's (and more broadly Sicily's) involvement with Roman power was such that even its *unintended* consequences were, frankly, consequential.

## II. Mediated influence and the developing landscape of habitation.

Under the circumstances, we would be justified in concluding, first, that Sicilian– and Roman interests existed in some degree of tension; and second, that the latter were much more important than the former, which had a limited say even in local developments. More to the point, we would be in good, or at least numerous, company, in doing so. As explained in Chapter 2 of this thesis,<sup>888</sup> the Sicily of both ancient– (and to some degree modern) historiography can be described in basically similar terms. Insofar as it emerges from our sources, Sicily's history is one in which the island is at best a supporting player. The protagonist's role belongs to Rome.

It is not my purpose, in this section, to deny the latter's influence. But it is necessary to complicate the picture somewhat. By way of illustration, it is worth considering, in a little more detail, the dolorous fate of local ceramic production. As presented above, it is a paradigmatic example of the tropes just enumerated. Importantly, however, this is not the only perspective from which to understand the episode. To the degree that the importation of foreign table wares had a hand in the involution of local production, local interests were undeniably prejudiced. But this is not to say that *all* local interests, or actors, were equally disadvantaged. Local ceramicists almost certainly were. Local *consumers*, however, may have viewed the situation quite differently. Judging by the relative frequency of local– versus

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884. See on the subject Jaïdi 2003 and Marin & Virilouvet 2003.

885. For an exposition of this route and its several variants, including via intermediate stops at Marettimo and Favignana, see Maurici 2005: 73–85.

886. Viz., as opposed to Mazara del Vallo, which developed into the most significant western port of the subsequent period of Muslim domination. As Maurici (2005: 96) notes, "[l]a conquista islamica modifica significativamente, anche nell' area più occidentale della Sicilia come nella cuspide di sud-est, la precedente gerarchia cittadina. I musulmani puntano su Mazara come centro urbano leader".

887. On Lilybetan thin-walled wares, see Chapter 4, n. 194. The phenomenon in question is not unique to this corner of Sicily, but rather seems to have happened all over the island, including in areas possessed of an indigenous fine ceramic tradition of wider-than-local appeal; thus Syracuse's Campana C and the thin-walled wares from Morgantina and Segesta: Chapter 3, nn. 23, 24.

888. Chapter 2, Section II.2.

imported table wares in the survey zone, the appearance of TSI and ARS on the market made the acquisition of a (semi-)luxury good more widely possible.<sup>889</sup>

Nor is this the only case in which the relationship between Roman- and local interests proved more complicated than it might at first appear. Even the transaction which most powerfully defined the relationship established between the two, the extraction of grain for shipment to the capital, did not only serve Roman ends. In contrast, however, to the situation with respect to ARS importation, it was a minority of Sicilians who stood to gain, and a majority, to lose. The former, as explained in Chapter 2, included the conductores and other local agents on which the system depended.<sup>890</sup> The latter, meanwhile, included the tenants; smallholders; and independent farmers whom they were in a position to exploit.

In sum, neither this nor the previous case can be described merely with reference to the tension between Roman- and local actors—not least because, depending on the circumstances, we cannot simply assume that such tension existed. As we have just seen, it was possible for their interests to align. At the same time, it was also possible for the interests of some local actors to be at odds with others'. Notwithstanding all this talk of "Roman" and "Sicilian" interests, neither was a monolithic bloc. In light of such complexities, it is clear that the historians' account of Roman Sicily's development is, if not wrong, then certainly incomplete. It is one thing to acknowledge the primacy of Roman concerns, during much of the period of our interest, and quite another suggest that they operated exclusive of local factors. It was the productive, and oftentimes dynamic, tension *between* the two which determined the island's historical trajectory. Changes in the balance of such interests, whether in respect of their power or aims, stood to influence local history.

### 1. Augustan-early Imperial consolidation.

By way of illustration, it is useful to consider the series of developments identified as constitutive of the local human landscape. The earliest of these, for our purposes in this thesis, was the consolidation of settlement which occurred during the late Republican-early Imperial period. This development is most easily understood with reference to Roman, as opposed to local, exigencies. The third-first centuries BCE were a time during which Sicily was primarily, if not exclusively, responsible for the fulfillment of the Roman civic annona.<sup>891</sup> The island's role in provisioning the capital guaranteed it an importance which was ratified, so to speak, by the significance of Roman senatorial presence on the island. These senators, however, were not merely representatives of imperial authority. They were also

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889. The above being, of course, the most limited interpretation of the evidence. More speculatively, we might posit that the increased availability of consumer goods reflected an increase in general prosperity. The point—that locals' trade with Rome, notwithstanding the fact that it took place on terms largely determined by the latter, could simultaneously reflect local desires, too—stands, regardless. "Semi-luxury" items, see Foxhall 1998.

890. *Passim*.

891. I.e., beginning, at latest, in 211/210 BCE—by which time, most scholars agree, the Syracusan decuma had come to be levied on the entire island—and 30 BCE, when Egyptian corn was designated for the supply of Rome, and Sicilian produce, consequently eclipsed. Further details, see Chapter 2, Section II.1.1.

economically active, most frequently in the agricultural sector.<sup>892</sup> For many, this meant the amassment of sometimes significant estates, the better to realize a profit on their produce.

Especially during the period of some 40 years between 73–30 BCE, when the Roman authorities took a full two-tenths of the annual Sicilian grain harvest,<sup>893</sup> corn was an especially sure bet. Consolidation, in turn, made a certain kind of sense. Concentrating the rural population in a limited number of denser areas had the effect of reserving proportionately more land for seed.<sup>894</sup> If, however, this explanation is plausible, it is also problematic. Among the difficulties is a question of chronology.

### 1.1. A grain merchant's argument for consolidation.

As we have seen, the process of rural consolidation seems to have reached its apex rather *later* than during the four decades just mentioned; that is, it accelerated *during*, rather than previous to, the reign of Augustus. On the face of it, this seems a little curious. Augustus' tenure witnessed at least two developments which we might expect to have militated against the dynamic in question. The 30 BCE conquest of Egypt, and the subsequent assignation of its corn to Rome, must have reduced the amount of Sicilian corn demanded by the capital—and so, perhaps, the area of land which needed to be reserved for the production of grain for the state. Further: if, as Pliny seems to suggest, the (proportional) *decuma* was replaced a decade later with a (fixed, and probably lighter) *stipendium*, the quantity commanded will have diminished still more.

The significance of these caveats, however, is not very great, at least for our purposes here. As explained earlier,<sup>895</sup> it is possible (and here once again important) to distinguish between the grain *commanded* by Rome, whether in fulfillment of the *annona* or simply in tax, and that which reached the capital by private channels. Notwithstanding that we remain in some doubt concerning the scale of the former, it is agreed that, even at their most extensive, the grain distributions fulfilled by the public *annona* only served a fraction of Rome's population.<sup>896</sup> The shortfall, meanwhile, was made up by grain bought and sold on the private market.<sup>897</sup> And

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892. Viz., following an early phase of primarily mercantile interest. During the Late Republic, Wilson (1990: 28) notes, resident Italians "were probably operating in Sicily as bankers and traders, and certainly later, in the pages of Cicero, it is as *negotiatores* that the majority" appear. Further, see Fraschetti 1981.

893. Excepting from the eight communities—Per Wilson 1990: 20, Messina; Taormina; Noto; Centuripe; Halaesa; Segesta; Halicyae; Palermo—which had been exempted from the tithe. Regarding the date: 73 BCE saw the promulgation of a law according to which the collection of a second tenth of the Sicilian grain harvest was made an annual regularity, rather than an irregular and essentially ad hoc occurrence. The significance of 30 BCE, meanwhile, has already been mentioned (n. 891).

894. "The very existence of the tithe, it may be argued, stimulated agriculture, encouraged more efficient farming, perhaps, and led to the cultivation of a greater acreage than previously": Wilson 1990: 21.

895. I.a., with regard to the profitability, for speculators, of one regime versus the other: see Chapter 2, Section II.1.3 with n. 89.

896. Chapter 2, Section II.1.2, with n. 47.

897. Or, perhaps, distributed to one's clients or friends, which Erdkamp (2014: 226) suggests was the likelier possibility. The distinction is of obvious economic significance, but does not much affect the present discussion. It seems unlikely that Sicilian farmers and supervisors were *aware* of, much less affected by, the mode(s) by which their produce was ultimately dispersed.

while the state could (and sometimes did) dictate unfavorable terms of sale, not all buyers were so powerful.<sup>898</sup> In other words, it is possible that the reduction in Roman state demand actually made the production of Sicilian grain *more* lucrative, not less.

So much, in any event, seems to be argued by Vera, who envisions a "suddivisione di ruoli fra una Sicilia prevalentemente 'commerciale' e un'Africa prevalentemente 'annonaria'".<sup>899</sup> Strictly speaking, the characterization is descriptive of a Late Antique, rather than an early Imperial, reality; the consolidation of settlement in the hinterland of Marsala predates the development of the North African annony bureaucracy.<sup>900</sup> But it seems nearly as well-suited to describing the period of Egypt's service. If the end of Sicily's annony obligations did, indeed, increase the profits to be made from selling grain to Rome, it likely also incentivized the reservation of arable land for corn. The early Imperial "privatization" of Sicilian cerealiculture, in other words, could actually have *stimulated* the consolidation of rural settlement, as well as contributed to the preference for sites in the vicinity of roads. The location facilitated the collection of local produce and its shipment elsewhere.

## 2.Land and power.

In solving the chronological problem, however, we introduce another. Implicit in the foregoing discussion is a question of power. As reconstructed above, the process of consolidation was largely driven by the interests of large landowners. Indeed, it was a process only they *could* have driven. The dynamic by which it advanced—the cultivation of ever-greater expanses of (contiguous) arable land—required the ability to dispose, in coordinated fashion, of truly extensive tracts of land.

More problematically, it required the ability to dispose of the people who lived and worked on those lands—and however convenient it might be for our thesis, this is not a power which we can simply assume. There are a number of reasons for this, not least of them the fact that, as presented, it is wholly undertheorized. What did it *mean* for large landowners to "dispose" of the people who, I have argued, they had a vested interest in relocating? And how did they effect the sort of relocation contemplated?

Notwithstanding its importance, this is not the sort of question which this thesis is well-situated to answer. It does, however, entrain another: how full a consolidation were they able to achieve? The centralization of rural settlement—or, maybe more accurately, its nucleation, at a limited number of previously-occupied sites—belies the existence of countervailing developments. One such was the inauguration of activity at Piscitello.

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898. Notwithstanding the relatively tight control Roman authorities exercised over the capital's grain market, there is little evidence to suggest that, in contrast to the regime obtaining during the early modern period, they were interesting in permanently fixing the price of grain: Erdkamp 2005: 283–306.

899. Vera 1997-1998: 39.

900. A description of which may be found in Chapter 2, Section II.1.3., with n. 87.



### 2.1. Piscitello's late foundation.

Although we cannot say much about the calculus which determined the *place* of its establishment,<sup>901</sup> it is possible to speculate productively concerning the circumstances which allowed it. Activity at Piscitello appears to have begun during the late second–early third century.<sup>902</sup> By this time, the consolidation of regional settlement was essentially a *fait accompli*. The extent of the phenomenon, however, should not blind us to its character. As argued above, it was largely a private initiative, and its impetus had more to do with aristocratic interests than official government policy. (The latter, meanwhile, was almost certainly a greater factor in the period preceding the acquisition of Egyptian corn for Rome.)

In one sense, this fact actually serves to make *more* impressive the scale of the transformation, insofar as it was accomplished without benefit, so to speak, of official compulsion. By the same token, however, it also means that there was room for other sorts of arrangements, especially among smaller scale agricultors. In light of the extent of what we have previously characterized as a relatively modest farm, I am inclined to identify the site at Piscitello as belonging to this latter class of inhabitants. This is not to say that the people settled at Piscitello were without means; on the contrary, the attestation of mosaic tesserae and statue fragments is indicative of a measure of wealth. But it is a different class of wealth—and certainly of site complexity—than we have observed at San Leonardo and Genna.<sup>903</sup>

The ongoing concentration of inhabitants living and working on lands belonging to large landowners meant a proportionately greater surface area was unsettled. Depending on the feasibility of enforcement, it is possible that these lands were unavailable for settlement by others,<sup>904</sup> but surely the same cannot be said for the lands which lay between, or beside, or in some other relation thereto. Given the region's general fertility, it would be curious if the latter were not also sometimes settled and cultivated.<sup>905</sup>

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901. See below, however.

902. Chapter 4, Section II.6.4; discussion, Section III.2.2.

903. Especially given the apparent permeability of the Sicilian countryside to imported goods, as demonstrated, i.e., by the presence of African- and some eastern Mediterranean amphorae and finewares at inland sites like Salemi and Segesta: Chapter 5, Sections II.4 and II.5.

904. But not, I think importantly, simply commonsensical. As discussed in Chapter 2, Section II.2.2.2 of this thesis, the correspondence of large-scale absentee landowners evinces a singular disinterest in the specifics of local settlement, even of their tenants. It is probably too much to assume that such interest was entirely *lacking*—else, the aforementioned consolidation of rural settlement would not *itself* have occurred—but rather that it was very probably a second order concern, of the sort to be regulated by, and according to the notions of, their respective conductores. In this regard, as in so many others, we might reasonably expect the latter to be inconsistent.

905. If not necessarily with an eye to export. The relatively modest dimensions of the farm in question do not mean, of course, that it was uninvolved in production for the market—as Pleket 1993 explains, even subsistence farms could be active in this sector—but it is unlikely to have been specifically oriented in this direction. In comparison with the settlements at San Leonardo and GE, which, as we have argued, were situated adjacent to regionally-significant roads, the farm at PI was located somewhat further afield. It is more than 1.5 km to the coastal road running adjacent to San Leonardo, and almost certainly more to any road connecting Marsala with Genna.

Needless to say, the settlement of places like Piscitello was *not* primarily driven by Roman exigencies. It does, however, attest to the continued relevance, and more to the point activity, of local as well as Roman actors. The latter were certainly dominant, during this period of the region's history. The contemporary intensification of activity at San Leonardo and Genna suggests that the settlement hierarchy continued to be defined, in broad strokes, by the Roman aristocratic interests which were instrumental in establishing the latter sites' regional significance. But it would be a mistake to think their authority was absolute.

### III. Inlanding.

Sometime during the fifth century, meanwhile, a change occurs. The continued flourishing of our three largest sites (San Leonardo, Genna, and Piscitello) counsels against describing this change as a *rupture*, precisely, but it was a change nonetheless. It is during this phase that we once again see the inauguration of new settlement, if evidently on a more modest scale than in the past. I refer, in specific, to the renovation of concentrated activity at Casa Abbadessa, and to a lesser extent Timpone Granatello, both of which had been all but abandoned since the late Republican period. This renewal is difficult to account for. The explanation offered for the inauguration of activity at Piscitello—to wit, on the initiative of small-holders existing on the margins of a human landscape organized with reference to large landowners' properties—may be relevant here, too. Unlike before, however, it is no longer necessarily the best explanation. Certainly it is not the only one.

As noted in Chapter 2, the first four centuries of the Common Era witnessed a growth in the relative extent of foreign— versus native-owned property on Sicily. The former consisted primarily in the estates of large-scale absentee landholders. If such estates were expanding, there will have been proportionately less land available for "liminal" settlements of the sort attested at Piscitello. As such, we are justified in seeking other factors. In this vein, it is worth recalling one of the *other* developments which can be dated to the fifth century: the inauguration, in 440, of Vandalic raids on the island.

#### 1. Vandalism.

It is difficult to know the real extent of the Vandals' depredations, given their frequently-hyperbolic treatment in contemporary historiography. In this case, however, there is archaeological evidence suggesting that their effects were not insignificant, especially in and around Marsala. Excavations in the area of the old Roman city, on Capo Boeo, have documented a thick destruction layer of burned and collapsed architecture dateable to the mid fifth century.<sup>906</sup> In comparison with a newly-perilous coast, inland areas like Casa Abbadessa and Timpone Granatello likely began to seem more attractive. On the other hand, this explanation is not without its problems. Chief among them is the evidence for the continued vitality of

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906. As dated on the basis of ceramics (predominantly fifth century North African) and monetary issues, notably of Theodosius II (*r.* 1 May 408–28 July 450): Di Stefano 1980: 16. The identification with continuing Vandal incursions is, I think, strengthened by the fact that the area, rather than being resettled, subsequently came to be occupied by a necropolis: Di Stefano 1984: 136.

coastal settlement, as represented by San Leonardo. Activity on site appears to decrease during the second half of the fifth century, but it never fully disappears. On this evidence, the Vandal threat was serious enough to drive people inland, but not serious enough to drive them *away* from the coast.

Thus stated, this seems pretty incoherent. Nevertheless, I do not believe it is irredeemably so. The proximity of San Leonardo to the northernmost of Roman Lilybaeum's harbors, as well as the variety of imported goods found on site, suggest that the site may have served as some kind of entrepôt.<sup>907</sup> If so, it cannot simply have disappeared, danger or no: the contrary incentives remained too powerful.<sup>908</sup> In any event, the significance of the Vandalic raids is not primarily a function of their severity. This is because, from the perspective of local settlement history, they are less important as a discrete episode than a sort of leading indicator. As recounted in Chapter 2, the mid-fifth century Vandal incursion heralded the end of a lengthy "pax siciliana".<sup>909</sup> In contrast to the period of western Roman sovereignty, the sixth, seventh, and eighth centuries were characterized by, if not precisely regular, then certainly frequent conflict. More to the point, this conflict was primarily a coastal phenomenon. Coastal battles were a feature of Belisarius' conquest of Sicily, by which Byzantine rule of the island was established. And they characterized the first two centuries of Arab efforts to wrest it from Constantinople's control. (The fall of Mazaro del Vallo, which is traditionally held to mark the beginning of the Arab campaign of conquest, occurred in 827. The first Arab raid, meanwhile, is usually dated to 652.<sup>910</sup>) In view of all these conflicts, we may reasonably say that the Late Antique landscape—in both literal and figurative terms—was characterized by a variably insistent, but basically constant, pressure to move inland. If only by reason of distance,<sup>911</sup> the interior was apt to be safer than the coast.

## 2.Out with the old.

If, however, we are to speak of incentives, it is worth asking: was there not also a contrary pressure? As reconstructed in this thesis, local settlement pattern development was strongly influenced by Roman aristocratic interests, specifically in the production and commercialization of Sicilian corn. To the degree that the atomization of local settlement threatened to reverse several centuries' worth of rural consolidation, it was a trend which stood to diminish, if not the actual volume of corn produced by the region's inhabitants, then certainly the ease with which large landowners could collect their share of it. And to the degree that the people leaving

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907. See Chapter 4, Section II.7.5.

908. This of course, was also the case at Lilybaeum, where, as we have already observed, the evidence for such dangers is strongest. In any event, there is an alternative. An increase in the overall regional population—which, if not proven by, then certainly compatible with, the relatively widespread evidence for local prosperity—may have allowed for the multiplication of inland stes without requiring a commensurate involution of coastal settlement.

909. Section II.1.4.

910. Pace Stratos 1976, who argues for 669.

911. Alternatively, or perhaps more accurately complementarily, we might recall that the interior was also somewhat *higher*, and so also presumably more defensible. I am hesitant, however, to press this argument overmuch, at least insofar as the survey universe is concerned. As we have many times noted, it is not until the eastern edge of the survey zone that we begin to see really notable elevations.

these old rural nuclei were moving further inland, they were also making the work of export more difficult. Local produce had to get to the coast before it could be shipped abroad.

I do not mean, in enumerating these disadvantages, to exaggerate the degree to which contemporary developments militated against the interests of the Roman landholding elite. The cost of overland shipping was not only a matter of distance; it was also a question of infrastructure, and, as we have noted, the local road system penetrated pretty far inland. (Indeed, it was this fact which facilitated the ascendancy of Genna.) But such qualifications are insufficient to argue that large land-owners would have simply accepted the dissolution of the landscape they had worked to create. Indeed, they had rather a lot to lose. Notwithstanding its diminution, the city of Rome remained an important export market.<sup>912</sup> And as of the mid-seventh century, there was Constantinople, too. Byzantium's loss of Egypt (642) and North Africa (647) to the Arabs meant that Sicily was once again responsible for provisioning a capital.

Under the circumstances, it does not seem plausible that the Roman landholding class underwent a change of heart: in contrast to the local population, *their* incentives remained similar to during the period of rural consolidation. How, then, to explain the changing landscape? By reference to changing power dynamics. Among the few things we can say regarding the administration of Byzantine Sicily—a topic which remains, in the main, frustratingly opaque—is that imperial policy favored the native Sicilian, rather than the Roman senatorial, elite.<sup>913</sup> The latter's diminished power, in turn, complicated efforts to enforce their will. In the hinterland of Lilybaeum—which, as the old Roman capital, was a stronghold of the traditional aristocracy—the ramifications of this loss of power were apt to be especially pronounced.

Getting much beyond the period of this thesis, such dynamics become even more significant. The sidelining of the old Roman elite, as achieved by Byzantine policy, paled in comparison to the loss of status occasioned by the Arab conquest of the island. The first two centuries of Muslim control are difficult to see, archaeologically speaking, but the limited evidence—in tandem with that from the more visible eleventh- and later centuries—suggests that the process of migration inland continued, if it did not actually accelerate. Still, it is possible to find islands of stability. In the area of interest to this thesis, in fact, we may identify three: Genna, Piscitello, and San Leonardo, which by all indications remained active for some time after the Roman era. The explanation for their longevity is undoubtedly multifaceted, but it surely depended, at least in part, on a factor we *can* identify—because we have already done so. The importance of Sicilian corn, and more to the point, its export to less-productive regions, was a feature of the Mediterranean economy until well into the Medieval period.<sup>914</sup>

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912. See Chapter 2, nn. 25, 64.

913. Discussion, see Chapter 2, Section II.1.4 ("The long Byzantine afternoon").

914. Archival materials attest to the importation, at places as far-flung as Djerba and Constantinople, of Sicilian grain through at least the fourteenth century: Renata Holod, pers. comm., October 28, 2014, on the basis of sources collected for the forthcoming second volume of *An Island through Time: Jerba Studies*. I am grateful to Dr. Holod for discussing the manuscript with me.

#### IV. A wider view.

The invocation of the grain trade and other pan-Sicilian "facts" brings with it a final question: how should we view the variety of experiences documented in Chapters 4 and 5? The multiplication of different trajectories across the island seems implicitly to undermine the notion that such developments were, in fact, universally relevant. There is some truth to this impression. Divergences in the history of the areas surveyed in Chapter 5 are sometimes difficult to reconcile with the broadly-Sicilian processes our authors muster to explain them. In a number of instances—as for example in the case of the Vandal incursions of the mid-fifth century—these differences can be explained with simple reference to geography. These raids were primarily a coastal phenomenon, and it is sensible that their effects would have been most heavily felt in littoral regions like Heraclea Minoa.<sup>915</sup> The continuity documented in inland regions like Monreale, Salemi, and Segesta, conversely, is likewise what we would expect.

The variability of other factors' incidence, however, is harder to parse. Fentress' notion of a Roman "resettlement" of the countryside, specifically owing to policies formulated by the governor Valerius Laevinus (210–207 BCE), is consistent with her reconstruction of Contrada Mirabile's settlement history. There, the third century does, indeed, seem to witness a florescence of new settlement.<sup>916</sup> But it is difficult to square with the late third–early second century history of Heraclea Minoa, where a pattern of scattered modest settlement seems less like an innovation and more like continuity with the pre-Roman past, or Monreale, where the extant settlement hierarchy actually collapsed. It is possible, of course, that Laevinus' policy contemplated a wider variety of arrangements than Fentress' interpretation admits.<sup>917</sup> And it might also be that, notwithstanding its presentation, Laevinus' vision was not everywhere realized (or, perhaps, never intended to be). But there is a still more parsimonious explanation. Both of the alternatives just offered are focused on the character, or the extent, of a presumptive Roman imperial initiative. Even the relatively-more-successful appeal to Vandal raids foregrounds the actions of an other. As I argued in the preceding section, however, such actors were not alone in

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915. And, perhaps, in the area of Contrada Mirabile, notwithstanding Fentress explains the fifth-century disappearance of scattered small sites as a consequence of the ongoing process of rural consolidation. It is unfortunate that none of the sites in question were targeted for excavation. Evidence of destruction, as was encountered most notably at Campanaio, in the area of Heraclea Minoa (see Chapter 5, n. 73), might help to settle the matter.

916. Not all aspects of her reconstruction are so persuasive, however: see Chapter 5, Section II.1.3, with n. 708.

917. The text on which her thesis depends (Livy, 27.5.5–6: "Omnes in urbis, in agros suos reductos arare, serere, desertam reoli terram, tandem frugiferam ipsis cultoribus populique romano pace ac bello fidissimum annonae subsidium") is actually rather vague. Quite apart from the fact that it purports to transmit Laevinus' *own* account of his accomplishments, and thus probably contains a measure of self-aggrandizement—is the governor claiming credit for something that simply happened on his watch?—it is unclear what, specifically, is intended by the reference to Sicilians "in agros suos reductos". (Indeed, I wonder whether a straightforward reading of the possessive, "suos", is actually *compatible* with Fentress' proposal, given that the latter envisions a colonization of previously unoccupied or utilized land.)

steering the course of Sicilian—or, more to the point, local—history. They were engaged with a population of local actors and –interests whose responses to imperial policy were, if not always determinative, then at least influential in shaping the development of settlement over time.

As a matter of fact, this examination of trends in MHS' survey area may actually *understate* the degree to which local interests mattered—or came to. As depicted in Fig. 52, the history of settlement in the area of Marsala bears more than a passing resemblance to some of the surveys from the previous chapter. In specific, it looks like the trajectories of Contrada Mirabile, Heraclea Minoa, and Segesta (the group characterized as "similar" in Chapter 5). There are also, however, some important differences, especially in virtue of the late-second century foundation of Piscitello, and in lesser measure the late fifth–early sixth century abandonment of Ditta Barbagallo. The former is basically unparalleled.<sup>918</sup> The latter, meanwhile, does not *seem* so obviously exceptional; Contrada Mirabile, Heraclea Minoa, and Segesta all witnessed a more-or-less contemporary phenomenon. In fact, the resemblance is more apparent than real. The possibility of early sixth century activity at Ditta Barbagallo suggests that the site was occupied longer than those near Contrada Mir-

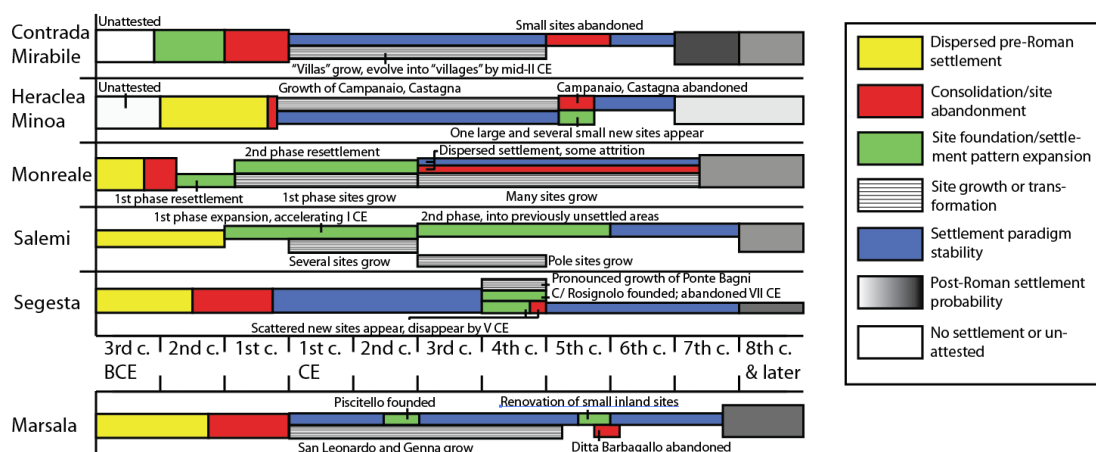


Fig. 52: Comparative Roman settlement histories (MHS included).

abile and Heraclea Minoa, all of which disappeared during the fifth. Segesta's phase of site-abandonment—which was complete by, rather than a feature of, the fifth century—was earlier still. There are also differences between the sites which disappeared. Those near Segesta, which were founded during the fourth century, were relatively recent foundations. Those near Contrada Mirabile, Heraclea Minoa, and Marsala, in contrast, were much older. It is unlikely, given such differences, that all these processes were actually one and the same.

More to the point, they do not seem susceptible to the same sorts of explanations. Instead, our authors are constrained to invoke a *variety* of different factors. This already makes for a contrast with the late Republican–Augustan period of the island's history, when local variation could be more– or less plausibly

918. Save for in a very superficial sort of way; Piscitello was founded during a period which, in the area of Salemi, was characterized by widespread settlement. The latter, however, embodied a *trend*: near Salemi, the period in question was characterized by settlement pattern expansion. Near Marsala, PI represented an exception to the rule.

explained with reference to Roman imperial policy. (Or, as in the case of Laevinus' presumptive program of resettlement, the unequal application thereof.) But it is not the only point of contrast. Explanations offered for middle- and late Roman developments are vaguer, too.<sup>919</sup> Per Fentress, the sites which disappeared from Contrada Mirabile in the fifth century fell victim to an ongoing process of nucleation, the impetus for which originated with the large land-holders who stood to profit from consolidating the local population at a smaller number of advantageous points.

Needless to say, I do not think there is anything *wrong* with this explanation; on the contrary, it is more or less identical to one I have offered regarding the evolution of settlement in the area studied by MHS. But it is as important to recognize how much it leaves unsaid. We cannot say how large these estates were, nor exactly where they ended. Nor do we know, at present, who owned them; who managed them; or the relations they maintained with the farmers who worked their land.<sup>920</sup> What we *do* know, however—on account of the limited literary evidence, when not simple common sense—is that the latter two groups, and some (limited?) quantity of the former, were overwhelmingly local. The very *fact* of our ignorance, in a certain sense, testifies to the growing power of local actors. The irony is evident. At precisely the time that authors like Ammianus Marcellinus and Paulus Orosius were writing about an idyllic and unchanging Sicily, change, both within and between Sicilian regions, was actually becoming more pronounced.

## V. Directions for future research.

### 1. Growing vistas.

If this impression is correct, then at least one venue for future research is obvious. Expanding the range of surveys considered in Chapter 5 would allow us to test the notion that local developments tended increasingly to diverge over time, and, if so, how large a range we might expect. A first stage of analysis would be to incorporate the evidence from the other western Sicilian surveys, especially Montagnola della Borranìa.<sup>921</sup> The consideration of central- and especially eastern Sicilian projects is a little more fraught, given the emerging evidence for the island's geographical "bipolarity", but it might nevertheless be useful.<sup>922</sup> The divergent economic- and political orientations of the western- and eastern halves of the island—toward North Africa and the Byzantine east, respectively—represented two broadly different contexts for local activity. Here, the aim would not be to demonstrate late Roman divergence, which, vis-à-vis the western Sicilian projects

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919. When, indeed, they are offered at all: Cambi does not even venture an explanation for the fourth-century "hiccup" attested near Segesta. Discussion, see Chapter 5, Section II.5.3.

920. Or—to quote an aphorism already invoked in Chapter 5, Section III.2.2.2.—"You can dig up a villa, but you cannot dig up its land tenure": Stevens 1966: 108.

921. As mooted in Chapter 5, Section I.

922. Sicilian "bipolarity", see Chapter 5, n. 759. Possible comparanda are numerous, and include, for central Sicily, the inland survey of Morgantina (Thompson 1999), and the coastal survey near Alesa (Burgio 2007; Burgio 2008). Eastern Sicilian surveys worthy of consideration, meanwhile, include those undertaken near Troina (Ayala & Fitzjohn 2002a; Ayala & Fitzjohn 2002b; Ayala & Fitzjohn 2007) and in the Upper Simeto Valley (Leone *et al.* 2007).



considered in this thesis, can basically be assumed. It would, instead, be to discern whether such supra-regional variation was of a more or less consistent sort. The presence of Byzantine administrators might suggest that it would; it was, after all, during the period of greatest Roman interest that settlement history was most consistent in western Sicily, and a similar dynamic might have worked to constrain the influence of eastern Sicilian actors. But this remains to be demonstrated.

Finally, and at still greater remove, are the survey projects undertaken in North Africa.<sup>923</sup> Its trade links with western Sicily were strong throughout the period of this thesis, but that is not the only reason why it represents an interesting area for comparison. For much of the period in question, vast tracts of African land were owned in absentia by the same cast of Roman aristocrats—the emperor; the senatorial class; and, later, the church—whose estates influenced the evolution of Sicilian settlement. In Africa, however, they were forced to operate under radically different circumstances. The region's annony obligations to Rome drove the state to intervene more frequently, and to all appearances in more significant ways, than it did in contemporary Sicily.<sup>924</sup> It would be curious indeed if this did not, in turn, influence the decisions taken by the foreigners who owned the land, or more to the point, the locals responsible for its management and cultivation.

In order, however, for these comparisons to be meaningful, something else is needed: a better standard by which to judge. Differences in project methodology and definitions mean that the process of comparison is not simply a question of juxtaposing results. It may be instructive to do so, provided we keep in mind how different authors' categories may or may not intersect; this sort of analysis is essentially what I have attempted in Chapter 5. But a real *solution* to the problem of cross-project comparison, notwithstanding the attention of many capable scholars,<sup>925</sup> remains to be found. In the meantime, a good first step would be for authors to publish their projects' raw data, in addition to (if obviously not in lieu of) the conclusions to which they lead. Doing so might not bring us any closer to a universal survey methodology, but it would, at least, facilitate the application of other modes of analysis. Provided MHS project directors are willing, this is a step I myself hope to take.

## 2. Filling in the blanks.

That said, there is much which could yet be done with the data from MHS, independent of (or prior to) the prospects for cross-project comparison. The first order of business, in this regard, is simply filling in the holes. As presented in Chapter 4, my treatment of MHS survey results is less than complete. In some measure, this is because of lacunae in the data to which I had access. Notwithstanding the project directors' generosity—without which, of course, this thesis would not exist—I have thus far been unable to procure all of the information

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923. E.g. Fentress, Drine & Holod 2009.

924. Save, that is, the earliest and latest periods of Roman control, when Sicily was settled with a similar obligation: first to Rome, in 73–c. 30 BCE, and then to Constantinople, following the fall of Egypt to the Arabs in 647.

925. See for example the contributions to Alcock & Cherry 2004.

required for a thorough analysis of the finds or their patterning. These absences are discussed in Chapter 4,<sup>926</sup> and as such, I will not rehearse them here. Among the most significant, however, were:

1. Incomplete sherd weights, a full accounting of which would have allowed for the quantification of project finds in a way which was complementary to the sherd-count method employed.
2. A lack of access to cumulative areal sherd counts, without which it was impossible to ascertain the *relative* significance of the Roman materials in which this thesis is primarily interested.<sup>927</sup>
3. Incomplete tile counts, which, in conjunction with scanty available information regarding "architectural" finds—stonework, statue fragments, mosaic tesserae, etc.—limited my ability to characterize the nature and extent of the built environment.
4. Scanty indications regarding the location of certain Topographic Units,<sup>928</sup> which constrained the possibilities for intra-areal distribution analysis.

Because my collaboration with the project is ongoing, I expect that the acquisition of these and other missing data will be a simple matter of time (and correspondence). Other questions, however, will not be so easily answered. Here, the issue is less one of incomplete information than of un- or under-developed analysis. With regard to the latter, my discussion of post-seventh century trends does not do justice to this period's inherent interest. To some degree, this was inevitable, given scholars' relatively limited knowledge concerning contemporary ceramics (especially vis-à-vis those of the phase immediately preceding). But there is also more information out there than I currently command, or, more to the point, could incorporate into my analysis. A greater familiarity with the relevant productions would allow for a commensurately more detailed history of Roman Sicily's final phase.

### 3. Tools to think with.

Other sorts of analyses, meanwhile, promise to shed a wider light. As noted in Chapter 3, this thesis' use of GIS software is fairly basic. The treatment of finds as part of a variable surface distribution of ceramics, rather than as indices for the binary presence or absence of a "site", is one of the ways in which I employed the software to go beyond mere "dots on the map".<sup>929</sup> And I made use of its surface-analytical tools to characterize the local topography, the better to test the plausibility of its influence on the pattern of documented finds. But such operations do not begin to exhaust the analytical possibilities afforded by the software. Among its most obvious applications, in a second phase of analysis, would be to test the plausibility of those relationships which I have proposed. Performing e.g. a regression analysis

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926. *Passim*.

927. Ditta Barbagallo, the analysis of which was partially prepared on site for presentation to the staff of the Museo Baglio Anselmi, is the sole exception to this.

928. Including, but not limited to, the tracts into which especially productive DUs were sectioned as well as the individual GCUs comprising Genna's Grid Collection Area.

929. Bintliff 2000a.

on the variables in question could be used to "check" whether, for instance, proximity to the coast explains more of the variation in site location than I supposed, or, contrary-wise, the proximity of contemporary roads explains less. Other tools, meanwhile, could be used to refine my characterization of the sites identified by MHS. By way of example, one or more viewsheds could be created to determine how commanding a view GE actually possessed of the surrounding terrain.<sup>930</sup>

Still other tools open entirely new avenues of analysis, among them a suite of techniques suitable for the study of overland movement. Foremost among these is the Path Distance tool,<sup>931</sup> which can be used to determine the least "costly" path in terms of surface distance, slope, and a variety of customizable factors—between a set of source points and every cell of an input raster. The output of this tool is not limited to these paths, however. It also produces an accumulated cost surface, which can, in turn, be utilized as an input for three other algorithms. Notwithstanding this fact, their modes of operation are quite different from that of Path Distance and broadly similar to one another.<sup>932</sup>

Bellavia's model of "natural pathways"<sup>933</sup> works on an accumulated cost surface in a fashion analogous to the hydrological algorithms used to model drainage patterns in a landscape. Where, however, the latter simulate the movement of water downslope, and in so doing identify the channels by which it most easily descends, the former measures the "runoff" characteristics of a metaphorical topography of cost. The result is a map of the channels, or "natural pathways", along which movement in the landscape is easiest—independent of, and prior to, the stipulation of either origin or destination. The other two models depart from this example in related but opposite ways. Fábrega Álvarez's MADO—"Modelo de Acumulación del Desplazamiento Óptimo desde un origen"—allows for the specification of a point of origin, whence potential least cost paths are modeled to proceed.<sup>934</sup> Llobera's "focal mobility network", meanwhile, defines only the point at which modeled paths converge.<sup>935</sup>

Provided proper input, these techniques can be used to adumbrate likely patterns of circulation. Given the importance accorded the Roman road system in my analysis,<sup>936</sup> the value of such tools should be obvious. Questions of movement—both of people and of goods, especially agricultural staples—were of evident interest to the local population. In all but the most general terms, however, they are basically absent from our analysis. Insofar as this absence is the result of scanty historical—and archaeological data, it is not a gap we are likely to soon fill. In the meantime,

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930. The answer to which question, it is worth noting, has ramifications beyond the simply descriptive; *ceteris paribus*, a site with an expansive viewshed is also a more *defensible* site.

931. A relatively modest use of which can be found in Chapter 4, Section III.3.1, where I calculate the most efficient path from individual survey areas to, first, the coast and second, to Roman Lilybaeum in terms of minimal surface distance.

932. Which is sensible, given that the first to be developed, Bellavia's "natural pathways" (see below), served as an inspiration for the other two.

933. Bellavia 2006.

934. Fábrega-Álvarez 2007.

935. Llobera, Fábrega-Álvarez & Parceró-Oubiña 2010.

936. Discussion, see Section I.1 above and Chapter 4, Section III.3.4.

however, the Path Distance and related tools offers a measure a consolation. Used judiciously, they allow us to more intelligently *speculate* regarding what we do not know. Inter alia, it would be instructive to determine:

1. Whether the two roads running, respectively, north and east from Marsala are at all similar to those suggested by GIS analysis—and, thus, whether the trajectory of these presumptive first-order roads was determined by factors we might reasonably foresee.
2. Whether the area in between those roads was possessed of any obviously more advantageous routes for circulation, or, conversely, could be traversed more— or less freely.
3. How widely our sites were separated, in terms of presumptive<sup>937</sup> time of travel.

From an economic perspective, the relevance of all these questions should be clear. But they are significant from another perspective, too (the latter two questions especially). As much as the domestic— and productive tasks associated with stable places of habitation, movement is an integral part of life. In this sense, analyses of the sort just mooted do not just promise a fuller understanding of the landscape as it was travelled; they offer the hope of insight into the landscape as it was *experienced*.

#### 4. Peopling the landscape.

The significance of this distinction—and more generally, the notion of an "experiential" landscape—requires some explanation. As is probably evident, the term emerges from phenomenological perspectives in archaeology.<sup>938</sup> The latter are too various to be treated in depth, here, but close to their heart is a relatively simple idea. The project of archaeology, according to this idea, is not (or at any rate, not only) to discern events and trends. It is to locate the embodied human actors who participated in them. A married farmer trudges to his fields, and in his absence, his wife manages the house. He returns, and she prepares dinner. Their rhythms, like the labors they each undertake, serve to reinforce both the organizational principles and the cultural roles according to which they live.<sup>939</sup> "[L]ife entails *movement*," Ingold says, "and is lived not in places but around them, and along the paths that lead to and from places elsewhere".<sup>940</sup> Movement, in other words, does not only have economic or broadly societal consequences. It is also relevant to the life of the individual, whose daily rhythms, as in the vignette just offered, were defined by it. This, in turn, suggests a way of proceeding. For the purposes of cost path analysis, the most typical proxies for cost—distance and metabolic energy expenditure—are not necessarily the most useful criteria. Time, however, might be.<sup>941</sup>

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937. As determined, primarily, on the basis of speed—which, though not a variable we can know with certainty, is one concerning which we can make an informed guess. For one such, see discussion of overland movement from Piscitello: Chapter 4, Section II.6.5.

938. As expressed i.a. by Tilley 1994; Tilley 2004. The bibliography extensive.

939. This example was inspired by remarks in Forbes 2007.

940. Ingold & Tilley 2005: 125. Emphasis in the original.

941. The idea, such as it is, is not a new one; it originally emerged from an earlier application of GIS technology known as site catchment analysis. The latter was developed to model the subsistence basis

There are, after all, only so many hours in the day; and as of the fourth century, there were only so many days in the week.<sup>942</sup> The rhythms of Mediterranean agricultural life, which per Horden and Purcell proceeded under the constant threat of shortfall due to meteorological variability,<sup>943</sup> left little time for indolence. The history of recent rural Sicily, and more specifically the experience that the majority had of it,<sup>944</sup> suggest another reason for favoring time as a measure of travel cost, however. During the several centuries<sup>945</sup> of Spanish rule over the island, a complicated mix of dynamics promoted the consolidation of rural estates—the *latifondi* of Mediterranean historical experience<sup>946</sup>—at the expense of peasant<sup>947</sup> smallholdings. This trend culminated, in the sixteenth and seventeenth centuries, with the establishment of rural "agro-towns" built in marginal areas which were often distant from the fertile lands of the *latifondi*.<sup>948</sup> Franchetti and Sonnino, who traveled the interior of the island in 1876, observed that

The peasant, to reach the fields which he must work, sometimes has to travel 15 or more kilometers. If the distance is great, he leaves home Monday morning, and returns Saturday evening, thus losing two half-days each week: then he sleeps in the open air in the countryside, usually beneath a rough shelter of straw and branches, erected temporarily in the middle of the fields, or sometimes leant against the buildings of the central *masseria*. If instead the distance is not too great, he leaves home before dawn and returns in the evening at sunset, thus losing two or three hours of work-time each day.<sup>949</sup>

The dissolution of this migratory regime came inconsistently to Sicily's various regions, but seems to have held on longest in the west of the island.<sup>950</sup> For the older

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of prehistoric communities by defining a "catchment area" of resources associated with each settlement: Roper 1978; Vita-Finzi & Higgs 1970. In its simplest form, this area might be defined as a function of distance from the settlement, but it soon became clear that other metrics could be utilized in place of distance. Verhagen *et al.* 1999, in a study of settlements in the Vera Basin in Spain, lit upon the idea of using time. Since then, however, archaeological fashion has tended to favor the calculation of cost on the basis of (metabolic) energy expenditure (such applications include Hare 2004 and Howey 2007 for the New World and, in the Mediterranean, papers by Sarah Craft and Alex Knodell, both of Brown University [Pers. comm.]). Its strengths as metric are obvious: published models depend on robust empirical data, and the units of measure are applicable regardless of socio-cultural context. But as observed in the preceding section, it is difficult to quantify social factors in kJ/m.

942. Zerubavel 1989: 45. The eight-day market week, which had previously existed alongside that established by the Julian calendar, was rendered moribund in 321 CE by Constantine's adoption of a seven-day cycle.

943. Horden & Purcell 2000: 178-179.

944. Details and information concerning sources on this period come from Mientjes, Pluciennik & Giannitrapani 2002 and Pluciennik *et al.* 2004: 29, n. 4, whose narrative I basically reproduce.

945. I.e., from 1302, when Frederick III of Aragón was crowned king of Sicily, until c. 1720, when the island passed into the hands of the Hapsburg Emperor Charles IV.

946. See Étienne *et al.* 1995 and discussion in Chapter 2.

947. Like Pluciennik *et al.* 2004: 29, n. 4, I mean the term in the only in the innocuous sense of "the rural poor, often landless or land-poor, who depended on agricultural labor for their living, and may have possessed tools such as hoes, oxen, or mules".

948. Cancila 1983; Davies 1983.

949. Franchetti & Sonnino 1877: 16, translated and cited by Pluciennik *et al.* 2004: 43.

950. Petruszewicz 1996; Petruszewicz 1997.

inhabitants of Marsala's rural hinterland, agricultural work meant travel. (To some degree, given the clustering of modern habitation in the MHS survey region, it still does.)

More specifically, however, it seems to have meant travel which was both regular and (at least anecdotally) of pretty typical lengths. Lucky workers might be gone for a day; unlucky, a week. Under the circumstances, it does not seem unreasonable to suggest that time played a powerful role in conditioning rhythms of movement and life for early modern inhabitants of the region which this thesis concerns. Indeed, this is the conclusion to which Pluciennik *et al.* arrive. "[V]irtually every day, though certainly subject to seasonal rhythms," they remark, the area of the latifondi "comprised extremely active 'task-scapes' ".<sup>951</sup> We cannot necessarily assume that such patterns held for the period of this thesis, of course. The latifondi of the early modern period, as we have seen, were not always like the latifundia of Roman Sicily. But it would be interesting to determine whether, for instance, the sites identified in this thesis were located a day's travel—or two, or more—from the markets in Lilybaeum, or the pastures which we have identified near the shore. The Marsala Hinterland Survey is over. But the area's exploration—as that of Roman Sicily in general—is barely begun.

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951. Pluciennik *et al.* 2004: 58.

## APPENDIX 1. CHAPTER 4 SUPPLEMENTARY MATERIALS

## I. Casa Abbadessa.

Discovery Unit	Tract sherds recovered
2132	4
2133	3
2134	1
2135	3
2136	1
2137	2
2138	1
2139	26
2140	8
2141	20
2142	18
2143	5
2144	4
2145	1
2146	3
2147	4
2148	1
2149	0
2150	1
2151	1
<b>TOTAL=</b>	<b>107</b>

Table 4: Casa Abbadessa tract sherd counts by DU.

Chronotype	N° sherds
Unknown amphora	15
Frag. amphora, Gallic or Iberian fabric	2
Frag. N. Afri-can amphora in the Roman tradition	4
Frag. N. Afri-can amphora in the Punic tradition	1
<i>Keay 62 A/D or 61 A</i>	1
Frag., Pantel-lerian ware	12
Pantellerian form M1.1.1 <sup>952</sup>	1

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952. Per the typology established by Guiducci 2003.



Chronotype	N° sherds
Unknown Roman fine ware	1
<i>ARS form 88 B or C</i>	1
<i>ARS form 98 or 108</i>	1
<i>ARS form 104</i>	1
<i>ARS form 105 A</i>	1
<i>ARS form 105 B or C</i>	1
Frag., ARS C fabric	1
Frag., ARS D fabric	3
Frag., ARS, fabric uncertain	8
<i>Frag. ARS base, late type</i>	1
<b>TOTAL=</b>	55

Table 5: Casa Abbadessa tract sherd chronotypes of potential sixth–seventh century date. Italicized types are late.

Chronotype	N° sherds
Unknown amphora	15
<i>Frag. amphora, Gallic or Iberian fabric</i>	2
Keay 35 A	1
Frag. N. African amphora in the Roman tradition	4
Frag. N. African amphora in the Punic tradition	1
Keay 62 A/D or 61 A	1
Keay 35 B, small or Spatheion 1	1
<i>Frag. amphora, Campanian "Black Sand" fabric</i>	1
<i>Late Greco-Italic or Dressel 1 amphora</i>	1
<i>Frag., Gallic amphora</i>	2
<b>TOTAL=</b>	29

Table 6: Casa Abbadessa amphora chronotypes. Characteristically early types are in italics.

## II. Ditta Barbagallo.

Discovery Unit	Tract sherds recovered	Grid Collection Unit	Tract sherds recovered
2301	10	001	0
2302	5	002	2
2303	81	003	0
2304	11	004	3
2305	3	005	1
2306	2	006	0
2307	1	007	1
2308	3	008	9

Discovery Unit	Tract sherds recovered	Grid Collection Unit	Tract sherds recovered
2309	14	009	3
<b>TOTAL=</b>	130	010	0
		011	1
		012	6
		013	4
		014	1
		015	3
		016	0
		017	0
		018	4
		<b>TOTAL=</b>	38
<b>TOTAL, all units =</b>		168	

Table 7: Ditta Barbagallo tract sherd counts by DU and GCU.

Chronotype	N° sherds
Unknown amphora	39
<b>Keay 57</b>	1
Frag. N. African amphora in the Roman tradition	12
<i>Frag., Roman Gallic amphora</i>	3
<b>LRA 2</b>	1
Afr. cookware form Bonifay 1 B (=Hayes 23 B) (C1.F0100B)	1
Frag., Afr. cookware, classic series (C1.F3900F)	27
Frag., Afr. cookware, casserole (C1.F4200M)	3
Frag., Afr. cookware, lid (C1.F4300M)	2
Frag., Pantellerian ware	1
Pantellerian form M2.x.	1
Unknown Roman fineware (F0.F00001)	2
<i>Frag., ARS A fabric</i>	9
<b>Frag. ARS D fabric</b>	2
Frag., ARS C/E fabric	1
Frag., ARS, fabric uncertain	4
<i>ARS form 14 or 18</i>	3
<i>TSI floor frag.: rouletting between grooves</i>	1
<i>LR-EI thin-walled table wares, origin unknown</i>	2
<i>LR-EI thin-walled table wares, local</i>	1
<i>African cookware OR ARS A frag.</i>	1
<b>TOTAL=</b>	117

Table 8: Ditta Barbagallo tract sherd chronotypes. Italicized types are characteristically early; bolded are late.

Chronotypes associated with the late first–late third centuries CE	N° sherds		Chronotypes associated with the period between 275–500 CE	N° sherds
Unknown amphora	39		Unknown amphora	39
Frag. N. African amphora in the Roman tradition	12		<b>Keay 57</b>	1
<i>Frag., Roman Gallic amphora</i>	3		Frag. N. African amphora in the Roman tradition	12
Afr. cookware form Bonifay 1 B (=Hayes 23 B) (C1.F0100B)	1		<i>Frag., Roman Gallic amphora</i>	3
Frag., Afr. cookware, classic series (C1.F3900F)	27		<b>LRA 2</b>	1
Fra., Afr. cookware, casserole (C1.F4200M)	3		Afr. cookware form Bonifay 1 B (=Hayes 23 B) (C1.F0100B)	1
Frag., Afr. cookware, lid (C1.F4300M)	2		Frag., Afr. cookware, classic series (C1.F3900F)	27
Frag., Pantellerian ware	1		Fra., Afr. cookware, casserole (C1.F4200M)	3
Pantellerian form M2.x.	1		Frag., Afr. cookware, lid (C1.F4300M)	2
Unknown Roman fineware (F0.F00001)	2		Frag., Pantellerian ware	1
<i>Frag., ARS A fabric</i>	9		Pantellerian form M2.x.	1
Frag., ARS C/E fabric	1		Unknown Roman fineware (F0.F00001)	2
Frag., ARS, fabric uncertain	4		<b>Frag. ARS D fabric</b>	2
<i>ARS form 14 or 18</i>	3		Frag., ARS C/E fabric	1

Chronotypes associated with the late first–late third centuries CE	N° sherds		Chronotypes associated with the period between 275–500 CE	N° sherds
<i>TSI floor frag.: rouletting between grooves</i>	1		Frag., ARS, fabric uncertain	4
<i>LR–EI thin-walled table wares, origin unknown</i>	2		<b>TOTAL=</b>	100
<i>LR–EI thin-walled table wares, local</i>	1			
<i>African cookware OR ARS A frag.</i>	1			
<b>TOTAL=</b>	113			

Table 9: Ditta Barbagallo tract sherd chronotypes associated with two phases.

## III. Genna.

Topographic Unit	Unit Type	Tract sherds recovered
1050	DU	4
1051	DU	3
1052	DU	4
1053	DU	12
1054	DU	23
1055	DU	22
1056	DU	7
1057	DU	13
1058	DU	1
1059	DU	3
1060	DU	0
1061	DU	2
1062	DU	1
1063	DU	2
1064	DU	0
1065	DU	0
1066	DU	0
-5, -6	GCU	1
-5, -3	GCU	2
-5, 1	GCU	1
-4, -7	GCU	4
-4, -4	GCU	5

Topographic Unit	Unit Type	Tract sherds recovered
-4, -1	GCU	12
-3, -6	GCU	6
-3, -5	GCU	2
-3, -3	GCU	6
-3, 1	GCU	8
-2, -7	GCU	8
-2, -4	GCU	21
-2, -2	GCU	7
-1, -6	GCU	10
-1, -3	GCU	2
-1, 1	GCU	13
1, -7	GCU	18
1, -5	GCU	13
1, -3	GCU	17
1, -1	GCU	13
3, -7	GCU	15
3, -5	GCU	20
3, -3	GCU	39
3, -1	GCU	28
4, -7	GCU	68
5, -8	GCU	11
5, -5	GCU	12
5, -3	GCU	31
5, -1	GCU	26
6, -7	GCU	16
6, -4	GCU	16
6, -3	GCU	19
6, -2	GCU	2
<b>TOTAL=</b>		569

Table 10: Genna tract sherd counts by TU.

## IV. Piscitello.

Discovery Unit	Tract sherds recovered
2201	0
2202	5
2203	1
2204	1

Discovery Unit	Tract sherds recovered
2205	82
2206	96
2207	24
2208	2
2209	0
2210	1
2211	0
2212	0
2213	0
2214	0
2215	0
<b>TOTAL=</b>	<b>212</b>

Table 11: Piscitello tract sherd counts by DU.

Chronotype	N° sherds
Unknown amphora	5
<i>Dressel 2-4, Italian</i>	1
African trilobate jug	1
African cook- ware frag.	39
Frag., Pantellerian ware	15
Pantellerian form M 1.2.1	1
ARS A frag.	4
ARS frag., production unknown	3
<i>TSI frag.</i>	1
<i>Thin-walled tableware in the LR-EI tradition</i>	3
Early–Mid-Roman lamp frag.	2
<i>Deneauve IV</i> _OR Bonifay 15 lamp	1
Roman lamp frag., ≠ARS	2
African cookware OR ARS A frag.	11
<b>TOTAL=</b>	<b>89</b>

Table 12: Piscitello tract sherd chronotypes of potential first century date. Italicized types are early.

## V. San Leonardo.

Discovery Unit	Tract sherds recovered
1001	0
1002	0
1003	0

Discovery Unit	Tract sherds recovered
1004	1
1005	0
1006	2
1007	0
1008	1
1009	0
1010	0
1011	0
1012	2
2001	6
2002	2
2003	4
2004	6
2005	5
2006	3
2007	6
2008	6
2009	12
2010	67
2011	196
2012	85
2013	40
2014	1
2015	6
2016	11
2017	6
2018	1
2019	2
2020	0
2021	5
2022	1
2023	1
2024	24
2025	30
2026	1
2027	2
2028	1
2029	2



Discovery Unit	Tract sherds recovered
2030	1
2031	2
2032	3
2033	3
2034	1
2035	4
2036	1
2037	0
2038	2
2039	1
2040	3
2041	4
2042	2
2043	2
2044	3
2045	1
2046	6
2047	0
2048	1
2049	0
2050	2
2051	2
2052	2
2053	1
2054	2
2055	1
2056	0
<b>TOTAL=</b>	588

Table 13: San Leonardo tract sherd counts by DU.

## VI. Timpone Granatello.

Discovery Unit	Tract sherds recovered
2101	1
2102	1
2103	1
2104	2
2105	0
2106	0

Discovery Unit	Tract sherds recovered
2107	0
2108	2
2109	1
2110	2
2111	0
2112	5
2113	1
2114	4
2115	2
2116	4
2117	2
2118	1
2119	2
2120	2
2121	0
2122	0
2123	3
2124	0
2125	1
2126	1
2127	0
2128	0
2129	3
2130	2
2131	0
<b>TOTAL=</b>	<b>43</b>

Table 14: Timpone Granatello tract sherd counts by DU.

## VII. Synthesis.

### 1.The numbers.

Survey area	Total, Roman tract finds	Roman tract find density (sherds/Ha)
Borso	6	0.81
Casa Abbadessa	107	28.84
Ditta Barbagallo	168	44.92
Genna	569	162.57
Marcanzotta	9	1.03

Survey area	Total, Roman tract finds	Roman tract find density (sherds/Ha)
Piscitello	212	93.81
San Leonardo	588	33.89
Timpone Granatello	43	4.74
<b>TOTAL=</b>	1702	30.56

Table 15: Area summary statistics: find quantity and –density.

## 2.The geography of settlement.

### 2.1. Proximity to the coast.

Survey area	Surface distance (± avg.)	Rank, ↑ Distance
Borso	2.6 (-)	3
Casa Abbadessa	5.3 (+)	6
Ditta Barbagallo	3.8 (-)	4
Genna	7.6 (+)	7
Marcanzotta	7.8 (+)	8
Piscitello	2.1 (-)	2
San Leonardo	0.4 (-)	1
Timpone Granatello	4.7 (+)	5
<b>AVERAGE=</b>	4.3	

Table 16: Survey area distance from the coast (km).

### 2.2. Proximity to Lilybaeum.

Survey area	Surface distance (± avg.)	Rank, ↑ Distance
Borso	11.8 (-)	4
Casa Abbadessa	12.8 (+)	6
Ditta Barbagallo	9.1 (-)	1
Genna	13.6 (+)	7
Marcanzotta	16 (+)	8
Piscitello	10 (-)	2
San Leonardo	10.6 (-)	3
Timpone Granatello	12.3 (+)	5
<b>AVERAGE=</b>	12.0	

Table 17: Survey area distance from Lilybaeum (km).

### 2.3. The role of topography.

Survey area	Min. elevation	Max. elevation	Avg. elevation	Standard deviation
Borso	27	44	34.6	3.54
Casa Abbadessa	128	143	132.8	2.26
Ditta Barbagallo	100	106	102.4	1.24
Genna	125	142	130.2	2.98
Marcanzotta	41	56	48.4	2.58

Survey area	Min. elevation	Max. elevation	Avg. elevation	Standard deviation
Piscitello	37	47	42.7	2.30
San Leonardo	2	16	7.6	3.26
Timpone Granatello	111	138	128.8	3.02

Table 18: Area summary statistics: elevation (m asl).

Survey area	Min. slope	Max. slope	Avg. slope	Standard deviation
Borso	0	12.7	2.8	2.07
Casa Abbadessa	0	9.7	2.8	2.00
Ditta Barbagallo	0	2.6	1.0	0.60
Genna	0	13.7	3.4	2.62
Marcanzotta	0	9.4	1.8	1.47
Piscitello	0	5.1	2.0	1.08
San Leonardo	0	8.4	1.9	1.46
Timpone Granatello	0	15.7	2.8	2.49

Table 19: Area summary statistics: slope (°).

#### 2.4. Viabilità.

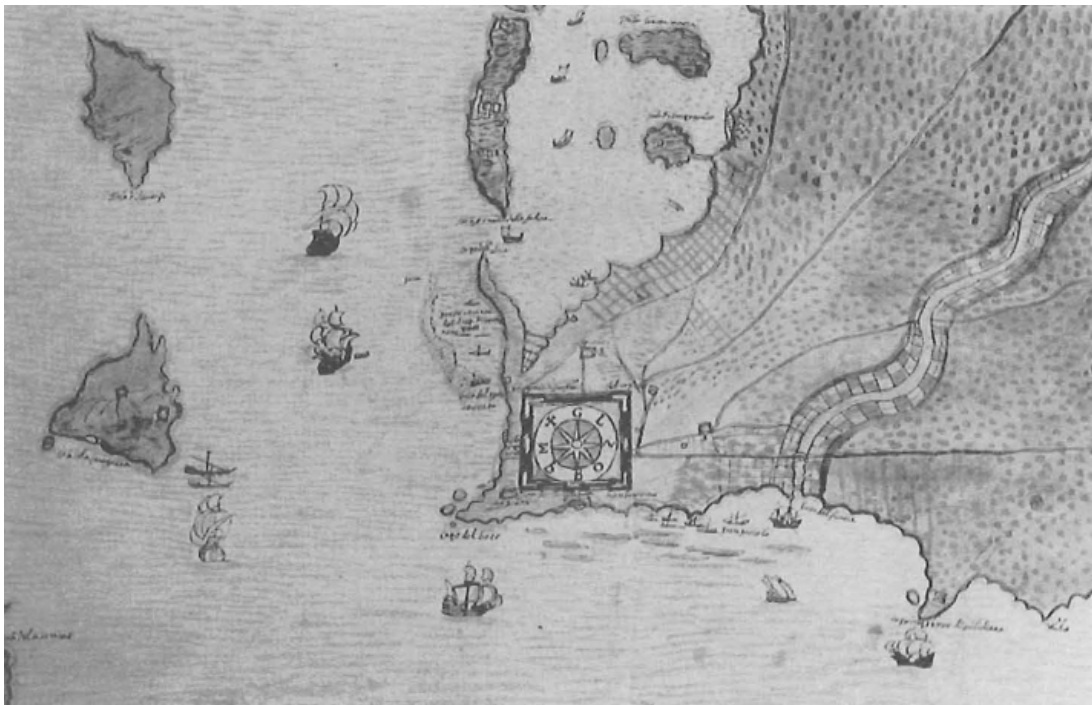


Fig. 53: Marsala and hinterland, per an anonymous eighteenth century map (Dufour 1992: 438)

## APPENDIX 2. FINEWARE CATALOG

## I. Introduction.

## 1. Prefatory note.

The sherds catalogued below comprise a representative sample<sup>953</sup> of the Roman Imperial- and Byzantine-period<sup>954</sup> fine wares recovered by the Marsala Hinterland Survey (MHS) during the 2008 and 2009 summer field survey campaigns. Finds made in the field were sorted by team members according to presumed chronology. The sherds deemed Roman were then subjected to a second stage of classification on the basis of presumed function. Among the classes established was that comprising the fine wares—primarily vessels for the table, but also including oil lamps—which were then passed to me for further processing. The lion's share of these sherds appear in the catalogue below,<sup>955</sup> with, it is worth making clear, two exceptions.

I have not, in the main, included non-diagnostic sherds, viz., those which furnish no information concerning the identity of the piece to which they pertained. These are, mostly, fragments from the walls or floor of the vessel to which they belonged. Such sherds are useful, primarily, for two purposes. First, they often suffice to identify the production to which the vessel belonged, whether Italian, African, or otherwise; and second, they may be used for purposes of quantification. Generally, however, the range of wares appearing among the non-diagnostic sherds is comparable to that which emerges from a study of the diagnostic pieces. And the relatively small number of sherds catalogued below is not amenable to more than rudimentary statistical manipulation, meaning that the calculation of sherd weights represents perhaps a step too far. The following are, after a fashion, anecdotal rather than statistical data.

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953. On the significance of which see n. 955.

954. Encompassing, in the terms employed by Malfitana *et al.* 2008: 170-171, the Early Imperial (30 - 100 CE), Middle Imperial (100 - 300 CE), Late Imperial (300 - 450/475 CE), and early Byzantine (450/475 - 640/650 CE) periods.

955. In order to ascertain whether the patterns emerging from this catalogue accurately reflected trends in the nature and distribution of the project materials as a whole—as opposed, that is, to the subset which I had been given following the preliminary sorting described above—I undertook a review of all the unsorted fragments during the 2011-2012 study seasons. The results of this review served to demonstrate that the imbalances described in Chapter 4 were, if anything, *more* marked than they might appear. The cassettes of unsorted material from Piscitello, San Leonardo, and especially Genna contained a significant quantity of fine ware sherds pertaining to the period under consideration here. The unsorted materials from Borso; Casa Abbadessa; Ditta Barbagallo; Marcanzotta; and Timpone Granatello, meanwhile, held only a few such catalogueable sherds. Under the circumstances, it was decided, in the interests of time, to refrain from including the latter fragments. Amplifying the present catalogue might have enlarged the range of possibilities for statistical analysis, but it would have done little to alter the panorama which is already evident: to wit, that the period of Roman control saw a concentration of activity at a limited number of extremely active sites.

I have also suppressed a variety of fragments which, usually for reasons of fragmentation, may plausibly have belonged to a variety of chronologically divergent forms. (When, on the other hand, such ambiguity obtains between forms of a more or less similar chronology, the piece is catalogued and the several possibilities enumerated.) Roman fine wares are useful for a variety of purposes, but foremost among these is the establishment of a chronology of human activity and/or presence in the area(s) under study. Absent such information, ceramic fragments become much less useful.

Catalogued sherds appear in the following format:

**1. Catalogue Number:** Identification. If the piece is illustrated, this is noted here.

*Context.* Discovery Unit (DU) or Grid Collection Unit (GCU) . If the piece is a grab find, this is noted here. Extensive survey finds are so described.

*Description.* Primarily, an enumeration of relevant dimension(s) and a description of the vessel fabric and slip. Pieces which are not illustrated also receive a brief morphological description and, typically, reference to published comparanda.

*Chronology.* Comments regarding the periodization of the piece and, when possible, its place of manufacture.

and are organized according to ware. Sherds pertaining to each production are listed chronologically. Sherds of ARS are listed according to the order established by Hayes in *Late Roman Pottery*. Thereafter follow a selection of sherds, the identification of which is, for various reasons, rather less certain. The latter include morphologically-ambiguous fragments; diagnostic base and wall fragments; and fragments bearing diagnostic decoration.

## 2. Abbreviations.

A variety of mostly conventional abbreviations are utilized in the following pages. They may be divided into basically two categories: those which concern the pieces themselves, especially in respect of their dimensions, and those which are employed in place of the most-commonly cited bibliography. The former include:

GPD: "Greatest preserved dimension"; used of pieces fragmented such that the provision of a more useful measurement (as for example of the diameter) is impossible. These are, in general, sherds which are either quite small, or so irregularly broken that other dimensions are difficult to ascertain.

p. (Dimension): Preserved.

H: Height.

W: Width.

Diam.: Diameter. Unless otherwise indicated, this is of the lip of the vessel. When another dimension is meant, a specific reference will follow: e.g., "diam. base".

ARS: African Red Slip. The term, popularized by Hayes in his *Late Roman Pottery*, has come to be conventional in English for the series of Roman African tablewares which had been previously, and rather more anonymously, described as Late Roman A and B wares (Waagé 1933; Waagé 1948: 43), and which continue to be referred to, in Italian and the other Romance lan-

guages, as *terra sigillata chiara* A, C, and D (Lamboglia 1941). (The letters are descriptive of several regionally-distinctive North African fabrics, and served as the basis for Carandini's more complete schema, elaborated in *Atlante I*. *Terra sigillata chiara* B has been shown to be a French, rather than North African, production, and is not discussed here.)

PRS: Phocaean Red Slip. The term proposed by Hayes (*Suppl.*: lix) in the 1980 *Supplement to Late Roman Pottery* as descriptive of the series of Roman tablewares which had theretofore been characterized, according to Waagé's schema, as "Late Roman C" wares. Both terms remain in use, though the former, employed here, has gained favor on account of its greater specificity with respect to the production's place of manufacture.

## II. Catalog.

### 1. *Italian Sigillata*. 10 fragments.

#### 1. **SL3001**: Frag. Italian Sigillata plate form *Consp.* (72-73) 12.4. Illustrated (p. 295).

*Context*. DU 2011 (grab find) (San Leonardo).

*Description*. Diam. 22cm. Fine pure buff (between 2/5YR 7/4 - 5YR 7/4) fabric with a red-brown slip.

*Chronology*. Middle - Late Augustan.

#### 2. **SL3042**: Frag. Italian Sigillata bowl form *Consp.* (112) 34. Illustrated (p. 295).

*Context*. DU 1012 (grab find). (San Leonardo).

*Description*. Diam. 12cm. Fine-grained brick-red (2.5YR 6/6) fabric in which some tiny particles of lime are visible. Smooth, lustrous red (10R 4/8) slip.

*Chronology*. Late Tiberian - Flavian (*Consp.* 112).

#### 3. **GE3032**: Frag. of the flange of an Italian sigillata cup form *Consp.* 34.

*Context*. GCU 6, -3 (Genna).

*Description*. Diam. flange 8cm. Fragment of the flange and part of the outer rim face of a form *Consp.* 34 (*Consp.* 112) cup. About half of an appliqué flower is preserved thereon. Fine pure pinkish (2.5 YR 7/4 - 7/6) ware with a semi-lustrous red-brown (2.5YR 4/8) slip. The latter is pretty uneven.

*Chronology*. Late Tiberian - Flavian (*Consp.* 112). The quality of the slip may point to a date late within this range.

#### 4. **GE3066**: Floor frag. of an Italian sigillata vessel, decorated with a course of rouletting between two grooves. Illustrated (p. 295).

*Context*. GCU 5, -1 (Genna).

*Description*. GPD 2.9cm. Fragment of the floor of an open Italian sigillata vessel, probably a plate, bearing impressed decoration on the interior surface. This consists in a band of rouletting bracketed by two cleanly incised grooves (diam. innermost groove 16.5cm). Fine pure pinkish ware with a semi-lustrous red slip inside and out.

*Chronology*. Per Kendrick (*Consp.* 148-149), this sort of decorative scheme appears on a variety of forms produced in Italian sigillata. In most of these cases, however, the

bracketed rouletting is located directly above the foot, which in the present example is entirely lacking. As such, it must have been located either outside of, or within, the line corresponding to the location of the foot. Given the diameter of the groove, noted above, the former possibility seems the likelier. Form *Consp.* 20 (*Consp.* 86-87), subtypes 20.3 - 20.5, is typified by this arrangement; it dates to the middle of the first century CE. **GE3067** may belong to the same vessel.

5. **GE3067**: Frag. of the floor and junction with the base of an Italian sigillata vessel, decorated with two tightly-spaced grooves. Illustrated (p. 295).

*Context.* GCU 5, -1 (Genna).

*Description.* Diam. inside foot 7.8cm, diam. inner groove c. 10cm. Fragment of the floor of an large open Italian sigillata form, the interior surface of which bears two incised grooves, and the underside, the point of attachment for a ring (?) base which is entirely absent. Fabric and slip, cf. **GE3066**.

*Chronology.* Grosso modo, fragments with similar characteristics might plausibly pertain to a variety of first and perhaps even second century CE forms. If, however, the present example corresponds to the same vessel whence came **GE3066**, a mid-first century CE date seems appropriate.

6. **DB3050**: Floor frag. of an Italian sigillata vessel, decorated with a course of rouletting between two grooves. Illustrated (p. 296).

*Context.* GCU 002 (Ditta Barbagallo).

*Description.* GPD c. 2.5cm, diam. inner groove 10.5cm, wall 0.62cm thick. Fragment of the floor of an open Italian sigillata vessel, probably a plate, bearing impressed decoration on the interior surface. This consists in a course of rouletting bracketed by two thin grooves, beyond which some rouletted impressions project. Fine pure brownish (5YR 7/4) fabric with a lustrous red (10R 4/8 - 10R 5/8) slip inside and out.

*Chronology.* Per Kenrick (*Consp.* 148-149), this configuration of rouletting and grooves is typical of a variety of first century CE Italian sigillata forms. The tracery of both rouletting and grooves becomes more careless with the passage of time, suggesting that the present example ought to be dated to the latter half of the century.

7. **SL3043**: Base frag. of an Italian Sigillata vessel.

*Context.* DU 1012 (grab find) (San Leonardo).

*Description.* Diam. base 11cm. Fragment of a tall (H c. 2.5cm) ring base, broken at the point of its juncture with the exterior vessel floor, of which a tiny bit is preserved. The exterior face is bevelled toward the bottom. The interior face, which extends somewhat further vertically than the exterior—the portion of the vessel corresponding to its surface inside the foot is absent at a level corresponding with the junction of foot and vessel on the outside surface—is smooth and unslipped. Brick-red (2.5YR 6/6) fabric, similar in composition to **SL3042**. A smooth, semi-lustrous red (10R 4/8) slip covers the exterior face and underside of the foot.



*Chronology.* Cf., in respect of profile, (*Consp.* abb. 6: 3, 6, 11), which correspond to a variety of shapes of with a chronology encompassing the first and second centuries CE (*Consp.* 158). It is difficult to be more specific than this, save for to note that the quality of the slip is, grosso modo, inconsistent with a vessel from the earliest part of this range. If indeed this and the following sherd are to be associated, a late first century CE date is reasonable.

8. **SL3044:** Floor frag. of an Italian sigillata vessel, decorated with a course of rouletting between two grooves.

*Context.* DU 1012 (San Leonardo).

*Description.* GPD 5.6cm. Fragment of the floor of an open Italian Sigillata vessel, the interior of which is decorated by two grooves, between which is a single band of rouletting. The underside is flat, save for at the innermost edge—at a point underneath the inner of the two grooves—where a carination corresponding to the junction with a ring base may be seen. Fabric and slip, cf. **SL3043**; the two fragments may correspond to a single piece.

*Chronology.* Cf., in general, comments re **GE3066**. If this and **GE3043** correspond to a single piece, that sherd's chronology is appropriate here as well.

9. **SL3032:** Wall frag. of an Italian Sigillata vessel with molded decoration in the shape of a palmette. Illustrated (p. 296).

*Context.* DU 2016 (San Leonardo).

*Description.* GPD c. 4.5cm measured parallel to height of palmette. Fragment of the wall of a molded Italian Sigillata vessel decorated with a relief palmette, the shape of which is somewhat eroded on account of the degradation of the vessel surface. Fabric (2.5YR 6/6) and slip (10R 4/8), cf. **SL3042**.

*Chronology.* Prob. first century CE.

10. **GE3041:** Floor frag. of an Italian sigillata vessel decorated with three concentric grooves.

*Context.* Extensive survey grab find: GPS coordinates 0285744, 4191210 (Genna).

*Description.* GPD 3.3cm. Fragment of the floor of an open vessel, probably a plate, in Italian sigillata. Three grooves are visible on the interior surface. Fabric and slip, cf. **GE3032**.

*Chronology.* Decoration like that seen on the present example is common on a variety of Italian sigillata forms, rendering difficult the circumscription of its chronology. Grosso modo, a date between the first and, perhaps, early second century is appropriate.

2. *African Red Slip*. 130 fragments.

1. **GE3004:** Frag. ARS bowl form Hayes 3B (small variant). Illustrated (p. 296).

*Context.* GCU 3, -7 (Genna).

*Description.* Diam. 10cm. Fragment of the rim and part of the wall of a Hayes (*LRP* 21–25) form 3B bowl (of which this is a small variant). Broad (1.7cm wide) everted rim, convex on its upper surface, which exhibits (fragmentary) barbotine decoration. Fine-grained orange fabric with a thick, lustrous slip of the same color on all preserved surfaces (cf. **GE3082**). The interior and rim bear fine brush marks, and the underside is pimply.

*Chronology.* Hawthorne (1998: 266-268), in his Appendix Seven, provides a table of ARS form dates incorporating chronological refinements made—principally by (Fulford & Peacock 1984; Mackensen 1993a; Mackensen 1993a; Reynolds 1995)—since the publication of *Late Roman Pottery* and its *Supplement*. He gives form 3B a date from 75-150 CE (Hawthorne 1998: 266). This and **GE3082** may belong to a single vessel.

2. **GE3038:** Frag. ARS bowl Hayes form 3B.

*Context.* Extensive survey grab find: GPS coordinates 0(6?)285683, 4191247 (Genna).

*Description.* diam. 13 - 14cm. Fragment of the rim of a Hayes (*LRP* 21–25) form 3b bowl. Granular orange (2.5YR 6/8) fabric with with a similarly colored slip, thick, lustrous, and a little pimply, on all preserved surfaces.

*Chronology.* 75 - 150 CE (Hawthorne 1998: 266).

3. **GE3082:** Frag. ARS bowl form 3B (small variant).

*Context.* GCU 3, -7 (Genna).

*Description.* Diam. 9cm. Fragment of the rim of a Hayes (*LRP* 21–25) form 3B bowl (small variant). Cf., for shape and decoration, **GE3004**. Small-grained orange (2.5YR 6/8) fabric with thick lustrous red (10R 5/8) slip with fine brushmarks apparent on the upper rim face and less so underneath, where some flaking is visible.

*Chronology.* 75 - 150 CE (Hawthorne 1998: 266). This and **GE3004** may belong to a single vessel.

4. **SL3004:** Frag. ARS bowl form Hayes (*LRP* 29–31) 6A or B. Illustrated (p. 296).

*Context.* DU 2011 (grab find) (San Leonardo).

*Description.* Diam. 18cm. Fabric (2.5YR 5/8 - 6/8) and slip (10R 5/8), cf. **GE3035**.

*Chronology.* Distinction between A and B variants of the form, based on the presence (A) or absence (B) of r rouletted circle on the vessel floor, is impossible in the present case. As such, a chronology encompassing both the earlier (6A: end of the first - early second century CE) and later (6B: middle - end of the second century CE) types is appropriate (*LRP* 29–31).

5. **GE3080:** Frag. ARS bowl form Hayes 8A (=Lamboglia 1A). Illustrated (p. 296).

*Context.* GCU 4, -7 (Genna).

*Description.* GPD 3.1cm. Fragment of the rim of a large (diam. illegible) Hayes (*LRP* 33–35) form 8A bowl. Rounded upper and lower ridges with a wide (H c. 1.5cm)

central molding, rounded in profile, which is entirely covered by several overlapping bands of rouletting (cf. *Atl.* tav. XIV: 6). Fabric and slip as **GE3073**.

*Chronology.* Multiple bands of rouletting and a rounded central molding are characteristic of Lamboglia's (1958: 263) type 1A, which is the earliest of the 8A subtypes and dates from c. 90 - middle second century CE (*Atl.* 26).

6. **GE3011**: Frag. ARS bowl form Hayes 8A(=Lamboglia 1B). Illustrated (p. 296).

*Context.* Extensive survey grab find: GPS coordinates 0285702, 4191223 (Genna).

*Description.* Diam. 27cm. Fragment of the rim and part of the wall of a Hayes (*LRP* 33–35) form 8A vessel. Straight flaring wall with a rolled and slightly thickened lip, below which, on the exterior surface, is a large triangular molding underlined by a small triangular ridge. A line of careless rouletting impressed on the triangular molding. Two grooves, both rather irregular, on the inner surface approximately at the level of the molding and the ridge. Coarse orange (2.5YR 7/8) fabric with a thick, lustrous, pimply slip (2.5YR 5/8) with fine tooling marks on inside and outside surfaces.

*Chronology.* Both on account of its size and decorative features—the angular profile of the molding and the carelessness of the rouletting thereon—the present example bears comparison with a late series divisible within the variety of types comprising Hayes form 8A (Lamboglia 1B: 1958: 263, *Atl.* 26). Such vessels are dated to the second half of the second century CE and, perhaps, a little beyond (Bonifay 2004: 156).

7. **GE3095**: Frag. ARS bowl form Hayes 8A (=Lamboglia 1B).

*Context.* DU 1057 (Genna).

*Description.* GPD 2.2cm. Fragment of the rim of a Hayes (*LRP* 33–35) form 8A bowl. Triangular central molding with a band of rouletting below its widest point. Two parallel on the inside surface, the upper opposite the central molding, the lower corresponding, perhaps, to a ridge which the present example does not preserve. Granular orange (2.5YR 6/6) fabric with well-sorted small quartz and some lime inclusions visible on the surface, which has entirely lost its slip covering.

*Chronology.* Second half of the second century CE and, perhaps, a little beyond (Bonifay 2004: 156).

8. **GE3046**: Frag. ARS bowl form Hayes 8A (=Lamboglia 1B).

*Context.* GCU 5, -3 (Genna).

*Description.* GPD 2.5cm, diam. illegible. Fragment of the rim of a Hayes (*LRP* 33–35) form 8A bowl. One line of neat rouletting on the widest part of the exterior convex molding, the profile of which is pretty angular. Coarse orange (2.5YR 6/8) fabric with a thick, lustrous, slightly pimply slip. Fine brush marks on inside and outside surfaces.

*Chronology.* Second half of the second century CE and, perhaps, a little beyond (Bonifay 2004: 156).

9. **GE3078**: Frag. ARS bowl form Hayes 8B (=Lamboglia 1C). Illustrated (p. 297).

*Context.* GCU 4, -7 (Genna).

*Description.* P. H 1.6cm. Fragment of the rim (diam. illegible) of a Hayes (*LRP* 33–35) form 8B bowl. The characteristic tripartite molding is in the present case only gestured at: the uppermost ridge is basically absent, and the large central molding projects out relatively little beyond the wall of the vessel (cf. *Atl. tav.* XIV: 6). Two internal grooves, the lower of which is incomplete on account of the vessel's fragmentation. Fabric and slip, cf. **GE3035**.

*Chronology.* As Bonifay (2004: 156) notes with respect to the chronology of Form 8 and its several variants, "[o]n est donc ici dans le cas de figure rare où il faut peut-être préférer la datation proposée par Lamboglia...à celle de Hayes". The former suggests a third century CE date for his equivalent form 1C (Lamboglia 1958: 263).

10. **SL3002**: Frag. ARS bowl form Hayes (*LRP* 33–35) 8B (=Lamboglia 1C). Illustrated (p. 297).

*Context.* DU 2012, tract 1 (San Leonardo).

*Description.* Diam. 22cm. Fabric (10R 7/8) and slip (10R 5/8 - 6/8), cf. **GE3078**, from which the present example differs primarily in that the slip is rather duller and, on the exterior, rather thin.

*Chronology.* Third century CE (Lamboglia 1958: 263).

11. **GE3079**: Frag. ARS bowl form Hayes 8B (=Lamboglia 1C).

*Context.* GCU 4, -7 (Genna).

*Description.* Two fragments (GPD c. 3cm, 3.2cm), both very worn, apparently corresponding to a single Hayes (*LRP* 33–35) form 8B bowl, the diameter of which is illegible but evidently larger than in the case of **GE3078**. Fabric and slip as **GE3078**.

*Chronology.* Third century CE (Lamboglia 1958: 263).

12. **SL3035**: Frag. ARS bowl form Hayes 8A or B.

*Context.* DU 2050 (San Leonardo).

*Description.* GPD 1.9cm, diam. illegible. Fragment of the rim of a Hayes (*LRP* 33–35) form 8A or B bowl, too little of which is preserved for further distinction. Only the uppermost of the typical two internal grooves is preserved, and on the outside, the break occurs just below the uppermost part of the standard molding. Fabric (10R 7/8 - 2.5YR 7/8) and slip, cf. **GE3095**.

*Chronology.* Second half of the second - third century CE (Bonifay 2004: 156; Lamboglia 1958: 263).

13. **GE3005**: Frag. ARS bowl form Hayes 9A. Illustrated (p. 297).

*Context.* GCU 3, -7 (Genna).

*Description.* Diam. 14cm. Fragment of the rim and part of the wall of a Hayes (*LRP* 35–37) form 9A bowl. Simple rounded rim atop a nearly vertical wall with two parallel grooves on the exterior surface. A course of rather careless rouletting has

been impressed within, and parallel to, the lower of the two grooves. Coarse, granular pinkish (2.5YR 6.5/8) fabric (cf. **GE3003**) with a thick, smooth red (10R 6/8) slip inside and out. The interior surface bearing fine tooling marks. The exterior is a little flaky.

*Chronology.* 100 - 160 CE (Hawthorne 1998: 266).

14. **GE3069**: Frag. ARS bowl form Hayes 9A.

*Context.* GCU 5, -1 (Genna).

*Description.* GPD 2.5cm, diam. > 25cm. Fragment of the rim of a Hayes (*LRP* 35–37) form 9A bowl. Vertical wall rising to a rounded, slightly thickened rim, below which on the exterior surface are two grooves and a band of crude rouletting between them. Fabric and slip, cf. **GE3005**. The present example is a little coarser.

*Chronology.* 100 - 160 CE (Hawthorne 1998: 266).

15. **GE3010**: Frag. ARS bowl form Hayes 14B (transitional to 15?). Illustrated (p. 297).

*Context.* GCU 3, -4 (grab find) (Genna).

*Description.* GPD 3.8cm, diam. 27cm. Fragment of the rim and wall of large ARS bowl, the wall of is vertical and slightly convex, with a simple thickened rim the upper surface of which is inclined slightly inward, and marked off from the interior by a subtle carination. Fine-grained light red (10R 7/8) fabric with a thick, lustrous red (10R 6/8) slip on all preserved surfaces. The slip is slightly pimply and bears fine tooling marks inside and out.

*Chronology.* In respect of its profile and the characteristics of the fabric, the present example bears comparison with examples (cf. *LRP* Fig. 6:8) of Hayes (*LRP* 39–41) form 14B, dated by Bonifay (2004: 159) to the first half of the third century CE. Form 14B is, however, typically smaller than the present example (14B=Lamboglia 3 B1, diam. 16.5 - 24.2cm [*Atl.* 33]), the diameter of which bears comparison with the late (second half of the third - fourth century CE (Bonifay 2004: 159) form 15, into which it probably evolves. The earlier date remains the likelier, however.

16. **DB3020**: Frag. ARS bowl form 14A or 16. Illustrated (p. 297).

*Context.* DU 2302, tract 2 (Ditta Barbagallo).

*Description.* p. H 1.6cm, wall 0.38cm thick. Diam. illegible. Fragment of the rim and part of the wall of a Hayes' (*LRP* 39–41, 41–42) form 14A or 16 bowl. Thin wall rising obliquely to a rounded, slightly thickened rim, bevelled on its outer face. Thin, fine-grained orange fabric with small rounded quartz grains prominent in the matrix. Thick, lustrous orange slip, rather pimply, with fine brushmarks inside and out.

*Chronology.* Forms 14 and 16 belong to the range of late second and third century CE forms mostly produced in Carandini's (*Atl.* 19) A2 fabric, the appearance of which varies substantially. The quality of the present example, which approaches that of the earlier A1 and A1/2 productions, argues for a date around the turn of the century, as does Bonifay's (2004: 157–159) experience demonstrating that forms 14A and 16 are probably the earliest in the series.

17. **PI3048:** Frag. ARS vessel, type cf. Hayes (*LRP* 39-41, 43) forms 14 and 18. Illustrated (p. 297).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* Diam. 20.5cm. Small-grained orange-pink (10R 6/8, core reduced: 5YR 7/8) fabric with a lustrous, slightly pimply slip (10R 5/8 - 6/8).

*Chronology.* See comments re **PI3022**.

18. **GE3094:** Frag. ARS vessel, type cf. forms Hayes 14 and 27. Illustrated (p. 298).

*Context.* DU 1056 (Genna).

*Description.* GPD 2.2cm, Diam. 15 - 20cm. Fragment of the rim of an ARS vessel, prob. Hayes (*LRP* 39-41, 49-51) form 14 or 27. Rounded wall rising to a simple thickened rim. Coarse, granular pinkish (10R 6.5/8) fabric in which several large particles of lime may be seen alongside the typical range of A and A/D type impurities, quartz prominent among them. A thin, pimply red (10R 5/8) slip covers both outside and inside surfaces, the latter of which bears fine brushmarks.

*Chronology.* The profile is comparable with examples of the latest variant of Hayes (*LRP* Fig. 6: 14/17, 5) type 14, transitional to form 17, as well as his type 27 (*LRP* Fig. 8: 27, 9). The latter is the more plausible identification, given that type 14/17 is typically smaller even than the lower bound of the diameter range given above. Both forms, in any event, can be dated grosso modo to the third century CE (Bonifay 2004: 159).

19. **SL3024:** Frag. ARS vessel, type cf. forms Hayes (*LRP* 39-41, 49-51) 14 and 27.

*Context.* DU 2011 (grab find) (San Leonardo).

*Description.* Diam. 18cm. Re form, fabric (2.5YR 6/8), and slip (10R 6/8 - 2.5YR 6/8), cf. **GE3094**.

*Chronology.* Third century CE (Bonifay 2004: 159).

20. **PI3022:** Frag. ARS dish, type cf. forms Hayes 14, 18, and 27.

*Context.* DU 2205, tract 3 (Piscitello).

*Description.* Diam. 25cm. Granular pinkish (10R 6/8) fabric with many small inclusions, among which rounded quartz and then lime are predominant. Inside and outside surfaces are covered by a thick, lustrous, slightly pimply orange (2.5YR 5/8) slip which is flaking on the exterior rim face.

*Chronology.* It is difficult, on the basis of what is preserved, to distinguish between a range of forms of similar morphology: thankfully, their chronologies are all pretty similar. Hayes (*LRP* 39-41, 43) Forms 14 and 18 belong to the range of late second and third century CE forms mostly produced in Carandini's (*Atl.* 19) A2 fabric, the appearance of which varies substantially. Hayes (*LRP* 49-51) form 27, which was also sometimes produced in A2, but more typically in Carandini's (*Atl.* 52-53) A/D fabric (Mackensen & Schneider 2006: 173-174), is also primarily a third century form (Bonifay 2004: 159).

21. **PI3023:** Frag. ARS dish, type cf. forms Hayes 14, 18, and 27.

*Context.* DU 2205, tract 3 (Piscitello).

*Description.* GPD 3.3cm, diam. illegible. Fabric and slip, cf. **PI3022**.

*Chronology.* late second or, more probably, third century CE: cf. notes concerning **PI3022**.

22. **GE3003:** Frag. ARS plate form Hayes 27. Illustrated (p. 298).

*Context.* GCU 3, -4. Grab find (Genna).

*Description.* Diam. 24cm. Fragment of the rim of a Hayes (*LRP* 49-51) form 27 plate. The wall of the vessel rises almost vertically to a simple rounded rim which curves back inward slightly at its apex. A single groove runs parallel to the lip on the inside surface 0.77cm below the rim. Granular orange-pink fabric with a thick, lustrous well-smoothed red slip (10R 4.5/8) on inner and outer surfaces. Various large inclusions have erupted through the exterior slip covering producing a number of pock-marks. The slip on the inner face shows some evidence of flaking.

*Chronology.* Hayes form 27, produced in Carandini's (*Atl.* 52-53) A/D fabric, of which the characteristics are consonant with those of the present example, is dated by Bonifay (2004: 159) to the third century CE, grosso modo.

23. **SL3033:** Frag. ARS dish form Hayes 27.

*Context.* DU 2021 (San Leonardo).

*Description.* GPD 1.4cm, diam. illegible. Fragment of the rim of a Hayes (*LRP* 49-51) form 27 dish. Thick, rounded wall, incurved at its uppermost extent, with a simple rounded lip and a single groove on the inside surface about 0.8cm from the rim (profile, cf. *LRP* Fig. 8: 27.1). Coarse orange (10R 7/8 - 2.5YR 7/8) fabric with a thin, dull orange-pink (towards 10R 7/8) slip on interior and exterior surfaces; the latter is pitted where several large gray and white inclusions (perhaps ferrous? Mackensen & Schneider 2006: 170) have exploded through.

*Chronology.* Third century CE (Bonifay 2004: 159). This is likely to be an example of the shape produced in late A, rather than A/D fabric; cf., for the opposite case, **SL3037**.

24. **SL3037:** Frag. ARS dish, type cf. forms Hayes (*LRP* 49-51, 52-55) 27 and 31. Illustrated (p. 298).

*Context.* DU 2012, tract 1 (San Leonardo).

*Description.* Diam. 29cm. Profile as depicted. The groove illustrated on the inside surface of the vessel is rather carelessly made, being of both inconsistent width and incised on a line which is not precisely parallel to the vessel lip. The exterior groove is rather more careful. Granular orange (2.5YR 6/8) fabric with a thick, lustrous, well-smoothed red-orange (10R 6/8 - 2.5YR 6/8) slip on inside and outside surfaces.

*Chronology.* In view of the size of the vessel; the profile of the rim; and the character of the ware, Hayes forms 27 and 31 are perhaps the best comparanda. Of the two, form 27—or rather, the variety made in Carandini's (*Atl.* 52-53) A/D fabric—seems the more convincing. The gentle roundedness of the wall is less commonly seen in

examples of form 31, and while exterior grooving of the sort seen here is not precisely typical of form 27, neither is it unknown (cf. e.g. Bonifay 2004: Fig. 85: 27.1). In either event, a third century CE date is probably appropriate.

25. **GE3024:** Frag. ARS vessel wall, type cf. forms Hayes 27 and 31.

*Context.* GCU 3, -7 (Genna).

*Description.* P. H c. 2.2cm, wall 0.7cm thick. Fragment of the wall and part of the floor of a large open ARS vessel, probably Hayes (*LRP* 49-51, 52-55) form 27 or 31. A slight offset, marked on the inside of the vessel by a tiny groove, divides a shallow, curving wall from a floor which slopes slightly upward toward the center of the vessel (not preserved). Fine-grained ware with a variety of well-sorted small inclusions, lime apparently chief among them. A thick, lustrous, well-smoothed slip covers inside and outside surfaces.

*Chronology.* The profile here is to be compared with examples of Hayes forms 27 and 31, both produced in A/D fabric (*Atl.* 52-53) like the present example. The two forms are similar in respect of the portion of the vessel preserved, with form 27, in the main, tending to a shallower, more rounded wall, and thus perhaps the likelier identification. Both are third century CE forms (Bonifay 2004: 159).

26. **PI3055:** Frag. ARS vessel, type cf. forms Hayes 27 and 31.

*Context.* DU 2210, tract 3 (Piscitello).

*Description.* Diam. 15 - 25cm. Fragment of the rim and part of the wall of what is probably a Hayes (*LRP* 49-51, 52-55) form 27 or 31 dish. The wall rises nearly vertically, curving only a little, to a simple rounded rim, the lip of which is slightly pointed. Coarse orange (2.5YR 6/8) fabric with a similarly-colored thick, lustrous, well-smoothed slip on inside and outside surfaces.

*Chronology.* Third century CE (Bonifay 2004: 159).

27. **PI3027:** Frag. ARS dish form Hayes 27/31. Illustrated (p. 298).

*Context.* DU 2205, tract 3 (Piscitello).

*Description.* Diam. c. 26cm. Fragment of the rim and part of the wall of a Hayes (*LRP* 53) form 27/31 vessel. Steeply rising rounded wall, the curvature of which becomes acute near the lip, producing a pointed, incurved rim. Granular brownish (2.5YR 5/7) fabric in which many small inclusions are visible, among them notably rounded grains of quartz. Thick, lustrous, reddish-brown (2.5YR 5/8) slip on inside and outside surfaces, the latter of which is notably flaky. Burned.

*Chronology.* 190 - 210 CE (Hawthorne 1998: 266).

28. **PI3021:** Frag. ARS bowl, type cf. forms Hayes (*LRP* 51-52) 28 or 29. Illustrated (p. 298).

*Context.* DU 2205, tract 3 (Piscitello).



*Description.* Diam. 19cm. Coarse orange (2.5YR 6/8) fabric with a thick, semi-lustrous, slightly mottled reddish (10R 6/8) slip on all preserved surfaces. Both interior and exterior bear tooling marks.

*Chronology.* 28: 205 - 225 CE; 29: 205 - 250 CE (Hawthorne 1998: 266).

29. **SL3013:** Frag. ARS dish form Hayes (*LRP* 52-55) 31. Illustrated (p. 298).

*Context.* DU 2010 (grab find) (San Leonardo).

*Description.* Diam. 23cm. Fabric (10R 6/8, core 10R 6/6) and slip (10R 6/8 - 2.5YR 6/8), cf. **PI3055**.

*Chronology.* Third century CE (Bonifay 2004: 159).

30. **PI3026:** Frag. ARS vessel, type cf. forms Hayes 32 and 33.

*Context.* DU 2205, tract 3 (Piscitello).

*Description.* Diam. 26cm. Fragment of the rim of what is probably a Hayes (*LRP* 55-56) form 32 or 33 dish. Short (c. 1.4cm) flat rim. Coarse, granular pinkish (10R 6/8) fabric with a smooth, semi-lustrous orange (2.5YR 4/8 - 5/8) slip inside and out.

*Chronology.* First half of the third century CE (Hawthorne 1998: 266).

31. **PI3018:** Frag. ARS bowl, form Hayes (*LRP* 56-57) 35 or 36. Illustrated (p. 299).

*Context.* DU 2206, tract 1 (Piscitello).

*Description.* Diam. c. 15cm, wall 0.2cm thick. Fine, well-levigated orange fabric with a smooth matte red slip on interior and exterior surfaces, at least to where preserved.

*Chronology.* First half of the third century CE (Hawthorne 1998: 266).

32. **PI3017:** Frag. ARS vessel form Hayes 44. Illustrated (p. 299).

*Context.* DU 2206, tract 1 (Piscitello).

*Description.* Diam. at outside of rim 16cm. Fragment of the rim of what is probably a Hayes (*LRP* 61-62) form 44 dish. The innermost part of the rim, and consequently its juncture with the vessel wall, is absent. That which is preserved is nearly flat for approximately half its width, at which point the rim begins to droop, terminating in a rounded member. The underside of the rim is somewhat irregularly finished, bearing a variety of marks produced by turning. Small-grained fabric (2.5YR 5/8) with a thin, glossy, and slightly mottled slip (2.5YR 5/8 - 2.5YR 6/8) appearing everywhere save for under the rim.

*Chronology.* Hawthorne (1994: 267) gives a chronology of 220-300 CE. The present example should not, probably, be dated to a point which is too early within that range, given its similarity to the "C" variant of the related form 45, which Hayes (*LRP* 65) dates the first half of the fourth century, and especially form 46 (cf. *LRP* Fig. 11: 46.2), which begins in the last quarter of the third century and is produced through the first quarter of the fourth.

33. **GE3049:** Frag. ARS bowl form Hayes 45A. Illustrated (p. 299).

*Context.* GCU 5, -3 (Genna).

*Description.* Diam. illegible. Fragment of the rim of a Hayes (*LRP* 62-65) form 45A vessel. Fine flat rim (p. W 1.3cm), slightly convex on the upper surface and concave on the lower. The upper face is decorated with a groove at its outer extreme and at least one band of careful rouletting. Fine pure reddish (towards 10R 5/8) fabric with a thin, glossy red (10R 6/8) slip on all preserved surfaces.

*Chronology.* 230 - 320 CE (Hawthorne 1998: 267).

34. **PI3035:** Frag. ARS plate form Hayes (*LRP* 69-73) 50A (late). Illustrated (p. 299).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* Diam. 25 - 30cm, wall c. 0.4cm thick. Fine, well-levigated pinkish (10R 6/8) fabric. The inside surface is covered and the upper part of the exterior are covered with a thin, matte, well-smoothed slip of approximately the same color (10R 5/8 - 6/8) as the clay. Some faint brushmarks are visible on the inside.

*Chronology.* The quality of the ware, and the thickness of the wall, are grosser than is typical of Hayes A variant, of which the bevelled rim seen here is however typical. As such, an identification with the transitional "late" type Hayes (*LRP* 72) invokes to describe his examples 47-55 is probably appropriate. They are dated 300 - 360 CE (*LRP* 73).

35. **PI3047:** Frag. ARS plate form Hayes 50A (late) or B.

*Context.* DU 2205, tract 1 (Piscitello). 2.5YR 5.5/8 fabric, 10R 5/8 slip

*Description.* GPD c. 2.5cm. Fragment of the rim of a Hayes (*LRP* 69-73) form 50 plate, likely type A (late) or type B. Simple rounded rim with a faint bevel. Fabric (2.5YR 5/8 - 6/8) and slip (10R 5/8) characteristics, cf. **PI3035**. It is possible that both fragments correspond to a single piece.

*Chronology.* 50A (late): 300 - 360 CE (*LRP* 72). 50B: 350 - 400 CE (Hawthorne 1998: 267). The former is the likelier identification, in view of the similar fragment **PI3035**.

36. **SL3025:** Frag. ARS plate form Hayes (*LRP* 69-73) 50A (late) or 50B.

*Context.* DU2011 (grab find) (San Leonardo).

*Description.* Diam. 33cm. Shape, fabric (10R 5/8), and slip (same), cf. **PI3047**.

*Chronology.* 50A (late): 300 - 360 CE (*LRP* 72). 50B: 350 - 400 CE (Hawthorne 1998: 267). The size of the present example argues in favor of an identification with the late A type, rather than the B, the diameter of which is typically inferior to 30cm.

37. **PI3034:** Frag. ARS dish form Hayes (*LRP* 69-73) 50B. Illustrated (p. 299).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* Diam. 35cm. Fine, well-levigated reddish-yellow (5YR 6/6 - 7/6) fabric with a thin, matte red (10R 5/8) slip on inside and outside surfaces to the break. The interior surface is well-smoothed and a little glossy in places. The outside is splotchy and in some places thin to the point of disappearing entirely. An atypically poor example of the form, but still within parameters.

*Chronology.* 350 - 400 CE (Hawthorne 1998: 267).

38. **CA3008:** Frag. ARS plate form Hayes 50, n. 61. Illustrated (p. 299).

*Context.* DU 2139, tract 5 (Casa Abbadessa).

*Description.* Diam. 18cm, wall 0.38cm thick. Rim fragment of a Hayes' (LRP 71) form 50 plate, subtype as his illustrated n. 61. Relatively granular orange fabric with a thin matte slip inside and over exterior rim face. Both the interior and the unslipped exterior bear fine tooling marks.

*Chronology.* Hayes' n. 61, originally classified as a "late variant" of the form under which it was subsumed, has been shown to be a production of the pottery at Sidi Zahrani (Ghalia, Bonifay & Capelli 2005). Bonifay (2004: 197) dates it to the first half of the fifth century CE.

39. **PI3020:** Frag. ARS plate form Hayes (LRP 71) 50, n.61. Illustrated (p. 300).

*Context.* DU 2205, tract 3 (Piscitello).

*Description.* Diam. 29cm. Granular orange (2.5YR 6/8) fabric with a thin, semi-lustrous red-orange (10R 6/8 - 2.5YR 6/8) slip on the inside surface and the exterior rim face.

*Chronology.* First half of the fifth century CE (Bonifay 2004: 197).

40. **PI3003:** Frag. ARS bowl form 52B. Illustrated (p. 300).

*Context.* DU 2205, tract 2 (Piscitello).

*Description.* Diam. 25cm. Fragment of the rim of a Hayes (LRP 76-78) form 52B bowl. Wide (p. 2.8cm) flat rim with a hooked lower edge. The exterior face of the rim bears two parallel grooves. Most of an appliqué boar (cf. *Atl.* motivo 58: tav. LXXXIII: 5), applied to the upper rim face, is preserved. Well-levigated granular fabric (10R 6/7) with a smooth matte slip on the upper surface of the rim and its exterior face.

*Chronology.* 280 - 375 (Hawthorne 1998: 267).

41. **SL3029:** Frag. ARS bowl form Hayes (LRP 76-78) 52B.

*Context.* DU 2011, tract 2 (San Leonardo).

*Description.* GPD 1.0cm. Fragment of the rim of a Hayes form 52B ARS bowl. Flat rim with a hooked outer edge and a single groove on the exterior rim face. The majority of the preserved surface of the rim face is taken up by a fragmentary appliqué decoration, the nature of which is difficult to discern on the basis of what little is preserved. Possibilities include a leaf or fern (cf. *Atl.* motivo 12: tav. LXXXI: 9) or, perhaps, the mane of a lion (cf. *Atl.* motivo 60: tav. LXXXIII: 10). Fabric (2.5YR 6/8) and slip (10R 5/8 - 2.5YR 5/8), cf. **PI3003**, save that in the present case the slip appears to cover the underside of the rim as well.

*Chronology.* 280 - 375 (Hawthorne 1998: 267).

42. **PI3039:** Frag. ARS vessel form Hayes form 52.

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* Diam. c. 17cm. Fragment of the rim of what is probably a Hayes (*LRP* 76-78) form 52 bowl. Flat rim with a flat upper face, a hooked outer edge with a single groove, and a concave underside. The lip is not preserved. Small-grained reddish (10R 6/8 - 7/8) fabric in which some small lime grains are visible, covered on upper face and rim exterior with a thin matte slip. The underside of the rim bears some irregular brushmarks.

*Chronology.* Owing to the exiguousness of what is preserved, it is impossible to say with certainty whether the present example represents a vessel of Hayes type 52A (dated 300 - 350 CE) or 52B (280 - 375 CE). The profile is more consistent with the latter type (cf. esp. *LRP* Fig. 13: 52.19), but appliqué decoration—the signal feature of form 52B—is lacking. Under the circumstances, a date in the first half of the fourth century CE is probably appropriate.

**43. PI3033:** Frag. ARS plate form Hayes (*LRP* 83) 55. Illustrated (p. 300).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* Diam. 33 - 34cm. Fine, well-levigated pink-orange (toward 2.5YR 6/8) fabric with thin, well-smoothed, glossy red (10R 5/8) slip on interior and exterior surfaces. The inside bears some evidence of brushing, whereas the outside has been more carelessly smoothed, producing several "facets". Burned.

*Chronology.* 355 - 450 CE (Hawthorne 1998: 267).

**44. SL3005:** Frag. ARS dish form Hayes (*LRP* 91-93) 57. Illustrated (p. 300).

*Context.* DU 2010, tract 3 (San Leonardo).

*Description.* Diam. 26cm. Fine-grained, well-levigated orange-pink (10R 7/8 - 2YR 7/8) fabric with a smooth, semi-lustrous slip, similar in color (10R 6/8 - 2.5YR 6/8), on all preserved surfaces.

*Chronology.* 325 - 400 CE (Hawthorne 1998: 267).

**45. PI3014:** Frag. ARS vessel form Hayes (*LRP* 93-96) 58B. Illustrated (p. 300).

*Context.* DU 2207 (grab find).

*Description.* Diam. c. 26cm. Fragment of the rim of a Hayes (*LRP* 93-96) form 58B dish. Granular pinkish (10R 6/8) fabric in which several relatively large calcareous inclusions are the more notable for the absence of many other visible impurities. A smooth matte slip (10R 5/8) appears on all preserved surfaces, but is thickest on the exterior rim face and thinnest on the exterior surface of the vessel wall.

*Chronology.* Characteristics of both fabric and slip liken the present example to the "B" variant of Hayes form 58. That said, the profile is most equally compared with a variant he illustrates (cf. *LRP* Fig. 14: 58.19), which, per the author, is probably to be dated to the earlier part of form 58's range. This encompasses the period between 290-375 CE, meaning that, for the present example, a date in the first half of the fourth century is probably reasonable.

**46. GE3065:** Frag. ARS vessel form Hayes 59. Illustrated (p. 300).

*Context.* GCU 5, -1 (Genna).

*Description.* P. W rim 1.7cm, rim 0.5 - 0.6cm thick. Fragment of the rim of a Hayes (LRP 96-100) form 59 dish, the diameter and stance of which cannot be ascertained owing to the vessel's fragmentation. Wide, flat rim with a convex molding in two fasciae on the upper surface. Coarse orange fabric with brownish slip covering the upper rim face.

*Chronology.* 320 - 400 CE (Hawthorne 1998: 267).

47. **PI3002:** Frag. ARS vessel form Hayes 59. Illustrated (p. 301).

*Context.* DU 2206 (grab find) (Piscitello).

*Description.* Diam. 23 cm. Fragment of the rim of a Hayes (LRP 96-100) form 59 dish. Broad (2.4cm wide) flat rim with two grooves, one at the outer edge and the other, nearer the vessel lip, delineating thereby a raised fascia. Coarse pinkish (10R 6/8) fabric in which lime is prominent. Smooth red (10R4/8) matte slip on the upper and lower surfaces of the rim.

*Chronology.* 320 - 400 (Hawthorne 1998: 267).

48. **GE3058:** Frag. ARS plate form Hayes 61A.

*Context.* GCU 3, -8 (grab find) (Genna).

*Description.* Diam. 32 - 34 cm. Fragment of the rim of a Hayes (LRP 100-107) form 61A plate. Incurved rim with a bevelled exterior face and a smoothly curved interior. Fabric and slip cf. **GE3052**; the surface of the latter is marginally more pimply.

*Chronology.* 325 - 450 CE (Hawthorne 1998: 267). "A" type vessels tend to be earlier in the range; Carandini (*Atl.* 85) suggests a chronology ending c. 400/420 CE.

49. **PI3005:** Frag. ARS dish form 61A.

*Context.* DU 2206, tract 1 (Piscitello).

*Description.* Diam. 22cm. Fragment of the rim of a Hayes (LRP 100-107) form 61A dish. External chamfer, facing upward at approx. a 45° angle, which at its uppermost point joins with the vertical inner surface to form a thin, incurved lip. Small-grained pink (10R 6/8) fabric. All preserved surfaces are covered by a smooth matte slip, similar in color (10R 5/8), which on the interior bears some evidence of tooling.

*Chronology.* Cf. remarks concerning **GE3058**: 325 - 400/420 CE (*Atl.* 85).

50. **GE3025:** Frag. ARS rim, plate form Hayes 61A/B2.

*Context.* GCU3, -7 (Genna).

*Description.* Diam. 36 - 38cm, p. H c. 1.5cm. Fragment of the rim of a plate, prob. Hayes (LRP 100-107) form 61A/B2. Vertical rim with a slightly convex outer face and a convex inner face which together sketch a triangular cross-section. Granular brownish (2.5YR 5/8) fabric with a thick red (10R 5/8) semilustrous slip on both inner and outer surfaces. The inside bears obvious brush marks. The outside slip is a little thinner and somewhat pimply.

*Chronology.* The size and state of preservation makes certain identification difficult, but the profile and fabric are consistent with Bonifay's (2004: 171) A/B 2 variant of Hayes' form 61, dated to the first half of the fifth century CE.

51. **PI3032:** Frag. ARS dish form Hayes 61A/B3.

*Context.* DU 2206, tract 3 (Piscitello).

*Description.* GPD 3.4cm, diam. 30 - 35cm. Rim of a Hayes (*LRP* 100-107) form 61 plate, which, on account of the angle of its external chamfer, is best characterized as belonging to the transitional variant A/B3 described by Bonifay (2004: 167, cf. Fig. 90: 6). Fabric and slip, cf. **GE3025**, than which the present example is however pinker (fabric 10R 7/8).

*Chronology.* Middle of the fifth century CE. Some examples may date from the end of the century (Bonifay 2004: 171).

52. **GE3007:** Frag. ARS plate form Hayes 61B1. Illustrated (p. 307).

*Context.* GCU 5, -3 (Genna).

*Description.* GPD c. 3cm. Rim fragment of a Hayes (*LRP* 100-107) form 61B1 plate. Nearly vertical rim with a flat outer face and a convex inner face marked off by a groove (diam. 34 - 36cm) from the vessel wall, a little of which is preserved. The rim terminates, at its lower extent, in a prominent hooked overhang. The lip is broken and incomplete. Coarse, granular reddish (between 10R 6/8 - 2.5YR 6/8) fabric with thick smooth red (10R 5.5/8) slip on the inside surface and the exterior rim face, both of which exhibit wide tooling marks.

*Chronology.* The present example approaches the "fairly distinct subtype" identified by Hayes (*LRP* 101) as having a tall vertical rim. This is Bonifay's (2004: 171) variant B1, which he dates to the first half of the fifth century CE.

53. **SL3039:** Frag. ARS dish form Hayes 61B1 or 2.

*Context.* DU 2012, tract 1 (San Leonardo).

*Description.* GPD 2.6cm (parallel with direction of turning), diam. illegible. Fragment of the rim of a Hayes (*LRP* 100-107) form 61B1 or 2 plate. Nearly vertical rim with a flat outer face and a convex inner face meeting at a faintly rounded point. A well-defined groove demarcates the interior face of the rim from the vessel wall. The lower extreme of the outside face, meanwhile, is distinguished only by a change in angle, the overhang observed re **GE3007** being absent. Coarse, relatively fine-grained, rough-breaking orange (2.5YR 6/8) fabric. A smooth, semi-matte red (10R 6/8) slip is most evident on the interior rim face, having largely disappeared from the outside surface.

*Chronology.* The present example exhibits a rim profile which is, grosso modo, comparable with that of Bonifay's variant 61B1, but which is distinguished for lacking the exterior overhang which is characteristic of the latter type. As such, its exterior face is more easily likened to the variant 61B2. The chronology of both variants encompasses the first half of the fifth century CE (2004: 171).

54. **SL3026:** Frag. ARS dish form Hayes (*LRP* 100-107) 61B3. Illustrated (p. 308).

*Context.* DU 2011, tract 1 (San Leonardo).

*Description.* GPD c. 3cm. Form, fabric, and slip, cf. **SL3017**.

*Chronology.* Cf. **SL3017**.

55. **SL3017:** Frag. ARS dish form Hayes 61B3.

*Context.* DU 2010, tract 3 (San Leonardo).

*Description.* GPD c. 1.4cm, diam. illegible. Fragment of the rim of a Hayes (*LRP* 100-107) form 61 dish, more specifically of the B3 type described by Bonifay (1998: 72) (cf. Bonifay 2004: Fig. 91: 25; Reynolds 1995: Fig. 22: 1649, "ARS late 61B"). Coarse brownish (10R 6/8 - 2.5YR 6/8) fabric with a thin, smooth, slightly lustrous slip (10R 5/8 - 6/8) inside and to just below the rim. The interior surface has been tooled, producing a "faceted" effect.

*Chronology.* Middle - end of the fifth century CE (Bonifay 2004: 171).

56. **CA3003:** Frag. ARS vessel form Hayes (*LRP* 100-107) 61C. Illustrated (p. 301).

*Context.* DU 2135 (Casa Abbadessa).

*Description.* GPD c. 1.3cm, diam. not recorded. Fine-grained reddish (10R 5/8 - 2.5YR 5/8) fabric with a thick, lustrous red (10R 5/8) slip on the interior surface and rim face. The underside of the rim is unslipped and exhibits prominent fine turning marks.

*Chronology.* Middle - second half of the fifth century CE (Bonifay 2004: 171).

57. **CA3006:** Frag. ARS dish form Hayes 61C.

*Context.* DU 2139, tract 3 (Casa Abbadessa).

*Description.* GPD c. 2.3cm, diam. illegible. Fragment of the rim of a Hayes (*LRP* 100-107) form 61 plate, specifically of the late, and morphologically quite variable, C variant identified by Lund (1995: 500) and discussed by Bonifay (2004: 171) (cf., for profile, Démians d'Archimbaud 1994: Fig. 43, 47, and 49). Coarse orange (2.5YR 5/8) fabric with a variety of small inclusions and several large grains of rounded quarts visible in the outside wall. A very slightly darker slip (10R 5/8), thin and matte, is visible on the inside surface and, perhaps, on the exterior rim face, the surface of which is quite eroded.

*Chronology.* Cf. comments re **SL3006**.

58. **SL3006:** Frag. ARS dish, type cf. forms Hayes 61C and 87. Illustrated (p. 301).

*Context.* DU 2011, tract 3 (San Leonardo).

*Description.* Diam. 24cm. Fine-grained orange fabric (2.5YR 7/8, core 2.5YR 6/6) with a variety of well-sorted, mostly small inclusions. A thin, smooth orange (10R 6/8 - 2.5YR 6/8) slip covers the inside surface and the exterior rim face, below which the outside is tooled smooth. It is unclear whether the several grooves illustrated below the rim are deliberate or simply corrugation produced by the process of smoothing

*Chronology.* The similarity of forms 61B and 87 impelled Hayes (*LRP* 136) to suggest that the former evolved into the latter, an idea which Lund's (1995: 500) characterization of a type 61C rendered the more convincing (*contra* this theory of development, Bonifay 2004: 175). As such, it is reasonable to expect the production of forms like the present example (cf. also Ardizzone 1995: Fig. 16: 86/504), which seem typologically akin to both Lund's late type and the vessel which presumably succeeded it. In view of the substantial overlap between their respective chronologies (61C: middle - second half of the fifth century CE: Bonifay 2004: 171; 87A: 455 - 500 CE: Hawthorne 1998: 267), a date in the second half of the fifth century is probably appropriate.

59. **SL3010:** Frag. ARS dish, type cf. forms Hayes (*LRP* 69-73, 107-109) 50B and 62B. Illustrated (p. 307).

*Context.* DU 2011, tract 2 (San Leonardo).

*Description.* Diam. c. 34cm. Fine-grained, well-levigated orange-pink (2.5YR 5/8 - 6/8) ware that is however rough in the break. Medium-thick, matte, well-smoothed reddish (2.5YR 5/8) slip on the inside surface (rather thicker than in the case of **GE3026**) and uppermost part of the outside, where it all but fuses with the body clay. Below this, imperfectly smoothed surface in which some tiny striations, parallel to the direction of turning, are visible.

*Chronology.* Cf., in general, comments re **GE3026**. 62B is perhaps the better identification, given that vessels of Hayes form 50B rarely exceed 30cm in diameter, whereas vessels of form 62B most often measure 32 - 35cm (*LRP* 69, 107).

60. **SL3014:** Frag. ARS vessel, type cf. forms Hayes 62B or 64.

*Context.* DU 2010 (grab find) (San Leonardo).

*Description.* GPD c. 2.3cm, diam. illegible. Fragment of the rim of what is probably a Hayes (*LRP* 107-109, 109-111) form 62B or, somewhat less probably, 64 plate. Thick (c. 0.6cm), straight, flaring wall rising to a rounded, slightly bevelled lip; the profile is very like that of **SL3010**. The fabric (10R 6/8) and slip (10R 5/8 - 6/8) are also similar, though the former is rather coarser.

*Chronology.* 62B: 350 - 450; 64: 405 - 500 (Hawthorne 1998: 267). The similarity of this piece to **SL3010**, as well as the lower frequency of form 64 in the western Mediterranean (*LRP* 109), argue for an identification with the earlier type.

61. **PI3029:** Frag. ARS vessel form Hayes (*LRP* 109-111) 64. Illustrated (p. 301).

*Context.* DU 2206, tract 3 (Piscitello).

*Description.* GPD 2.3cm, diam. illegible. Granular pinkish (10R 6/8 - 7/8) fabric against which well-sorted lime inclusions are most visible. Thick, lustrous, well-smoothed red (10R 5/8) slip on the inside surface and on the exterior to a little above the break. Faint brushmarks are visible on the interior below the lip. The exterior is a little flaky.

*Chronology.* 405 - 500 CE (Hawthorne 1998: 267).



62. **CA3002:** Frag. ARS plate form Hayes 67B. Illustrated (p. 301).

*Context.* DU 2139, tract 2 (Casa Abbadessa).

*Description.* Diam. c. 24cm. Fragment of the rim of what is probably a Hayes (*LRP* 112-116) form 67 plate: this is the uppermost member. Everted rim with a convex upper surface, grooved at the lip, and a concave underside. The rim terminus is triangular in profile and hooked at its lowest extent. Thick, granular ware (2.5YR 5/8) in which lime is the predominant impurity. The slip (2.5YR 4/8), which covers the interior surface and the outside face of the rim terminus, is thick, lustrous, and evidently burnished.

*Chronology.* (Bonifay 2004: 173) subdivides Hayes' form 67 on the basis of variations in the rim profile. Subtype B, which the present example most closely resembles, dates to the end of the fourth/beginning of the fifth - middle of the fifth century CE.

63. **GE3052:** Frag. ARS vessel, type cf. Hayes forms 60 and 67.

*Context.* GCU 5, -3 (Genna).

*Description.* GPD 2.9cm, wall 0.8cm thick. Element of a more complex ARS vessel rim, probably belonging to a plate form Hayes (*LRP* 100, 112-116) 60 or 67. The preserved portion rises shallowly to its uppermost point, which is incomplete. The upper surface is marked with a single shallow groove, incised midway along its preserved width (c. 2.5cm). The lower surface is hooked downward at its outermost extreme, suggesting a knobbed terminus. Coarse pinkish (10R 7/8) fabric with a thick, semi-lustrous orange (2.5YR 7/8) slip on the upper surface and underside of the knobbed rim element. The unslipped underside of the rim bears fine brushmarks.

*Chronology.* The features preserved are compatible with the rims of Hayes forms 60 (355 - 400 CE: Hawthorne 1998: 267; cf. esp. the similar *Atl.* tav. XXXV: 1, dated to c. 350) and 67, specifically the C variant described by Bonifay (2004: 173: second half of the fifth century CE). Form 67, relatively the more frequent shape, is the more convincing identification, and its chronology consequently the more probable.

64. **PI3013:** Frag. ARS vessel, type cf. forms Hayes 60 or 67.

*Context.* DU 2207 (grab find) (Piscitello).

*Description.* Diam. 35cm. Fragmentary element of a more complex rim belonging to a large, open ARS vessel, probably Hayes (*LRP* 100, 112-116) form 60 (cf. esp. *Atl.* tav. XXXV: 1) or 67. Wide (c. 2.2cm) flat rim, inclined slightly toward the vessel lip, with a thickened, hooked terminus, incomplete at its lower edge. Two shallow grooves on the upper rim face define a faintly convex molding, more or less in line with the inclination of the rim. Pinkish-orange (2.5YR 6/7) fabric with a thick, lustrous, slightly mottled red-brown (2.5YR 5/8) slip on the inside surface and the exterior at least to break.

*Chronology.* Form 60: 355 - 400 CE (Hawthorne 1998: 267) (cf. esp. the variant form *Atl.* tav. XXXV: 1, dated to c. 350). Form 67, specifically the B variant described by Bonifay (2004: 173): end fourth - middle of the fifth century CE. The latter is the better parallel, both for reasons of shape and fabric, and supplies a more convincing chronology.

65. **GE3059:** Frag. ARS vessel, type cf. Hayes 67.

*Context.* GCU 3, -8 (grab find) (Genna).

*Description.* Diam. 25 - 30cm at lip. Preserved is a portion of the vessel wall rising to the lip, at which the profile turns outward to form a wide (c. 2cm) flat rim which is broken at a second point of carination, beyond which nothing is preserved. Coarse, granular fabric, the color of which is variegated on account of its having been burned. The inside surface bears the remains of a thin red (?) slip. The outside surface, underneath the rim element, is unslipped and smoothed.

*Chronology.* The profile is consistent with Bonifay's (2004: 173) B and C variants of Hayes (*LRP* 112-116) form 67, the dates for which span the end of the fourth and all of the fifth century CE.

66. **PI3001:** Frag. ARS vessel form Hayes 67/71. Illustrated (p. 301).

*Context.* DU 2206 (grab find) (Piscitello).

*Description.* Diam. 18cm. Fragment of the rim of a Hayes (*Suppl.* 485) form 67/71 plate. Fine, relatively well-levigated pinkish (10R 6/8) fabric with a reddish (10R 5/8) slip covering the inside surface and the exterior rim face, below which the surface is a little irregular.

*Chronology.* Production of the form is attested at El Mahrine during Mackensen's (1993a: 332, 435) periods 1B and 1C, 330 - 450 CE. Hayes (*Suppl.* 485) suggests a range beginning, instead, in the late fourth century, which, depending on the rapidity with which such vessels reached western Sicily, may be more appropriate.

67. **PI3019:** Frag. ARS vessel, type cf. Hayes form 68 (variant) or 76. Illustrated (p. 302).

*Context.* DU 2205, tract 3 (Piscitello).

*Description.* Diam. at internal groove >45cm. Thick-walled (c. 0.6 - 0.7cm) orange (2.5YR 6/8) ware which is nevertheless relatively fine, displaying a small typical grain size and rare, well-sorted inclusions, among which small lime and (to a lesser degree) quartz grains are most common. The interior surface is covered by a thin matte reddish (10R 5/8) slip, the surface of which has been smoothed in thin horizontal bands, producing an effect similar to burnishing. The exterior, which is apparently unslipped, has been similarly smoothed.

*Chronology.* The profile as preserved bears comparison with examples of Hayes (*LRP* 116-117, 124-125) forms 68 and 76, between which distinction is, in light of the degree of fragmentation, quite difficult. If the former, it represents a variant of the canonical vessel produced in Carandini's (*Atl.* 119) E fabric, the characteristics of which (cf. **PI3006**) are quite different from those of the present example. I am loathe, in view of the increasing evidence for the manufacture of pots like Hayes 68 and/or 76 at a variety of sites in Roman North Africa (i.a. Sidi Aïch, Henchir es-Srira, Henchir el-Guellal [Djilma], and Sidi Khalifa: Ben Moussa 2007: 141-145; Bonifay *et al.* 2003: Fig. 7: 59-61; Nasr 1992; Stern 1968), to attach the present example to a specific pottery. Nevertheless, it is worth noting the similarity of the fabric and slip to the two

fragments of Hayes form 88 vessels documented by the project (**CA3001** and **PI3036**), as well as the large variant of Hayes form 91C (**PI3010**), both within the range of forms produced at Sidi Khalifa. Whatever the vessel's provenance, the chronological ranges suggested for forms 68 (370 - 450 CE) and 76 (400 - 500 CE), respectively, ought to hold good for a variant, too.

68. **GE3070**: Frag. ARS vessel, type cf. Hayes form 68 (variant) or 76.

*Context.* GCU 5, -1 (Genna).

*Description.* Diam. lip 25cm, wall 0.9cm thick. Element of a more complex ARS vessel rim, probably belonging to a variant of form Hayes (*LRP* 116-117, 124-125) 68 or 76. A thick wall curves outward and upward to the vessel lip, where it is everted parallel to the base, forming a flat rim preserved to less than 1cm of width. Fabric and slip, cf. **PI3019**.

*Chronology.* The profile as preserved bears comparison with a variety of different shapes of fourth - fifth century CE chronology. On account of the character of the ware, however, it is tempting to compare the present example with the marginally-better preserved fragment **PI3019**, which is likely to correspond to a (possible variant) of Hayes form 68 or 76. The chronology of the former encompasses the period between 370 - 450 CE, while the latter is dated to 400 - 500 (Hawthorne 1998: 267). As such, a late fourth - fifth century CE date is probably appropriate. See **PI3019** for discussion at greater length.

69. **GE3001**: Frag. ARS bowl form Hayes 72A or 73A. Illustrated (p. 302).

*Context.* GCU 3, -1 (Genna).

*Description.* Diam. 19cm. Fragment of the rim of a Hayes (*LRP* 121-124) form 72A or 73A bowl. The undecorated rim rises very shallowly to a knobbed triangular terminus. The upper face of the rim terminus is offset very slightly from the rim, with which it runs basically parallel, while the exterior face is vertical and slightly convex. Three more-or-less evenly spaced notches, approximately 0.35cm wide at their highest point, in the rim. Granular orangish (2.5YR 7/7) fabric in which lime and a little rounded quartz are visible. A lustrous reddish (10R 5/8) slip covers the inside and outside face of the rim. Both the slipped interior and the unslipped rim underside bear fine brushmarks.

*Chronology.* Per Hawthorne (1998: 267), form 72 is dated from 405 - 425 CE, and form 73, from 400 - 475. A fifth century date is therefore appropriate.

70. **PI3012**: Frag. ARS bowl form Hayes 73B. Illustrated (p. 302).

*Context.* DU 2206 (grab find) (Piscitello).

*Description.* Diam. 12cm. Fragment of the rim of a Hayes (*LRP* 121-124) form 73B bowl. Wide (c. 1.4cm) flat rim terminating in an upturned, knobby element with a straight vertical exterior face and a rounded lower projection extending a little beyond the lower surface of the rim. The upper surface is marked with a two grooves, one located a little closer to the rim terminus than the lip, the second marking off the flat rim expanse from the upturned terminus. Granular fabric,

reddish in color tending almost to purple (10R 5/2), which may have been burned. A strong red (10R 4/8) slip covers the upper and exterior rim faces, terminating in a drippy, irregular edge below.

*Chronology.* Variants 73A and B are together dated to the period c. 400 - 475 CE (Hawthorne 1998: 267). Hayes (*LRP* 124) suggests that 73B is the later.

71. **GE3043:** Frag. ARS plate form Hayes 87A. Illustrated (p. 307).

*Context.* GCU 5, -3 (Genna).

*Description.* Diam. c. 38cm. The orientation as shown is approximate, owing to the erosion of the vessel lip. Fragment of the rim of a Hayes form 87A plate. Coarse pink-orange fabric. Thick, semi-lustrous pink orange slip, a little darker than the body clay, covers the interior surface, where it exhibits brushmarks deep enough to resemble fine corrugation, and the exterior rim face, where it is smooth.

*Chronology.* 455 - 500 (Hawthorne 1998: 267).

72. **PI3007:** Frag. ARS vessel form Hayes 87A/88. Illustrated (p. 307).

*Context.* DU 2211 (grab find) (Piscitello).

*Description.* Diam. c. 30cm. Fragment of the rim of a plate of the sort characterized by Bonifay (2004: 175) as transitional between Hayes (*LRP* 135-136) forms 87A and 88. Triangular rim with a convex inner face, off-set from the vessel wall, and a slightly convex outer face which leans a little outward past the vertical. The lower edge of the rim is hooked. Small-grained brownish (2.5YR 5/8) fabric with a slip of the same color on inside surface and rim face.

*Chronology.* End fifth - beginning of the sixth century CE (Bonifay 2004: 177).

73. **PI3053:** Frag. ARS vessel form Hayes (*LRP* 135-136) 87C. Illustrated (p. 302).

*Context.* DU 2207 (grab find) (Piscitello).

*Description.* GPD c. 4.9cm, diam. not recorded. Fragment of the rim of a Hayes form 87C plate. Coarse brick-red (2.5YR 5/8) fabric with a smooth matte red (10R 4/8) slip bearing broad tooling marks on inside and outside surfaces.

*Chronology.* 505 - 525 CE (Hawthorne 1998: 267).

74. **PI3036:** Frag. ARS plate form Hayes 88A or B. Illustrated (p. 307).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* Diam. 45cm. Fragment of the rim and a little of the wall of a Hayes (*LRP* 136) form 88 plate. Wide flat rim, marked off from the wall by a groove on the inside, with a convex upper and a flat or very slightly concave lower face. Very small-grained reddish (10R 5/8) fabric with few visible inclusions, covered on the inside and upper rim face by a thin, well-smoothed slip of approximately the same color as the body clay. Many faint parallels band bespeak the burnishing of the slipped surface. The unslipped surface bears some irregular tooling marks.

*Chronology.* The profile of the present example bears comparison with examples of Bonifay's (2004: 175-177) subtypes A (cf. esp. Fig. 93: 7) and B (cf. Fig. 93: 10). The

former dates to the second quarter - middle of the sixth century CE, and the latter, to the latter half of the same century. A mid-sixth century date is probably appropriate.

75. **CA3001:** Frag. ARS plate form Hayes 88B or C. Illustrated (p. 308).

*Context.* DU 2139, tract 2 (Casa Abbadessa).

*Description.* Diam. c. 36cm. Fragment of the rim of a Hayes (*LRP* 136) form 88 ARS plate. The interior face is convex and the exterior, slightly concave. Granular orange fabric, relatively well-levigated. A smooth matte slip, similar in color, covers the rim face and extends to just below the outer edge (cf. **PI3036**, than which the present example is rather coarser in respect of both ware [10R 6/8 - 2.5YR 6/8] and slip [2.5YR 5/8]). Tooling marks are visible on the slipped rim face. The unslipped exterior bears some faint turning marks.

*Chronology.* The rim profile is typical of Bonifay's (2004: 177) subtypes B and C, which he characterizes on the basis of finds from Sidi Jdidi (Ben Abed-Ben Khader *et al.* 2004) and *Pupput* (Ben Abed-Ben Khader & Griesheimer 2004), both near the probable site of production at Sidi Khalifa (Ben Moussa 2007, esp. 109-215). 88B: middle - second half of the sixth century CE; 88C: end of the sixth - beginning of the seventh century (Bonifay 2004: 177).

76. **PI3010:** Frag. ARS bowl form Hayes 91C (large variant). Illustrated (p. 308).

*Context.* DU 2205 (grab find) (Piscitello).

*Description.* Diam. 38cm. Fragment of the rim and flange of a large Hayes (*LRP* 140-144) form 91C bowl. Simple rounded rim rising c. 1.8cm above the stubby, downturned flange, immediately below which the vessel is broken. Fabric and slip, cf. **PI3019**. The color of the latter is, in the present example, a little less vividly red (2.5YR 5/8), and the lines of a burnishing, a little less defined.

*Chronology.* Grosso modo, examples of Hayes form 91C date to the middle of the sixth century CE (Bonifay 2004: 179). The present example belongs to a class of atypically large variants which Hayes (*LRP* 144) was unable to precisely date. On the basis of his work at Carthage, where he documented a number of such vessels (=Fulford 47.4 -6), Fulford (1984: 65) suggests a *floruit* between 525 - 575 CE. The present example, however, does not greatly resemble the vessels he illustrates, the flange of which is distinct for on account of its greater projection and the frequency with which it is decorated with two shallow grooves, absent here. Rather, it bears comparison with a vessel which Bonifay and Reynaud (Bonifay 2004: Fig. 108: 1) identify as a variant production from Sidi Khalifa and date, tentatively, to the first half of the sixth century. This is, in light of the characteristics of the ware in which the present example was made, a plausible identification.

77. **GE3016:** Frag. ARS bowl form 91C.

*Context.* GCU 6, -9 (grab find) (Genna).

*Description.* Fragment of the flange (diam. 20 - 25cm) and part of the wall of a Hayes (*LRP* 140-145) form 91C bowl. The flange is short, with a hooked, downturned profile and a rounded terminus. The wall is broken a little above and below its juncture with

the flange. The lip is absent. Reddish fabric (10R 6/8) and slip (10R 5/8 - 2.5YR 5/8) of characteristics cf. **GE3014**. The slip covers the inside surface and the upper face of the flange. Fine brushmarks are visible on the unslipped vessel exterior below the flange.

*Chronology.* The ware of the present example is consistent with the products from Oudhna (see **CA3011**), which is known to have made and exported pots of Hayes form 91C during the middle decades of the sixth century CE (Bonifay 2004: 179). Sporadic finds of vessels classifiable as Hayes 91C are known at Carthage from fifth century contexts, but it is clear that, if they are indeed contemporaneous with the other contents of these earlier assemblages, they date to a period during which export was not yet an important phenomenon (Fulford & Peacock 1984: 65).

**78. GE3031:** Frag. ARS bowl form Hayes 91C.

*Context.* GCU 6, -3 (Genna).

*Description.* Diam. 20 - 25cm, wall 0.6cm thick below flange. Fragment of the wall, flange, and rim—all broken and incomplete—of a Hayes (*LRP* 140-144) form 91C bowl. A thickened, downturned flange, the majority of which is missing, projects outward from the vessel wall at approximately 0.8cm below the rim, also incomplete. Coarse orange (2.5YR 6/8) fabric with many small inclusions, covered on the inside surface and on the exterior to just below the flange with a thin, matte, red (10R 4/8 - 5/8) slip.

*Chronology.* Middle decades of the sixth century CE (Bonifay 2004: 179).

**79. GE3020:** Frag. ARS bowl form Hayes 91D.

*Context.* GCU -4, -1 (Genna).

*Description.* GPD 2.1cm. Fragment of the flange and part of the wall of a Hayes (*LRP* 140-144) form 91D bowl. Coarse orange (2.5YR 6/8) fabric with a thick, matte, slightly darker (2.5YR 5/8) slip on the vessel's interior surface.

*Chronology.* Seventh century CE (Bonifay 2004: 179), *grosso modo*, though production may have begun toward the end of the previous century (Reynolds 1995: 31).

**80. SL3011:** Frag. ARS bowl form Hayes 91D. Illustrated (p. 302).

*Context.* DU 2007 (San Leonardo).

*Description.* GPD c. 3.2cm. Fragment of the rim of a Hayes (*LRP* 140-144) form 91D bowl (cf. *LRP* Fig. 26: 91D.26). Short, rounded lip rising up from a stubby (W c. 0.7cm) horizontal flange. What little of the wall is preserved below continues the line of the lip, turning gradually inward til the break. Coarse orange-pink (2.5YR 6/8 - 7/8) ware (cf. **GE3021**) with an extremely thin, dull slip (10R 5/8 - 6/8) on the inside and over the edge of the flange.

*Chronology.* Seventh century CE (Bonifay 2004: 179), *grosso modo*, though production may have begun toward the end of the previous century (Reynolds 1995: 31).

81. **GE3064:** Frag. of the rim of an ARS vessel type cf. Hayes forms 78 and 91. Illustrated (p. 302).

*Context.* GCU 5, -1 (Genna).

*Description.* Diam. 24cm. Fragment of the rim of an ARS vessel, probably Hayes (*LRP* 127, 144) form 78 or 91. Thick, everted rim, hooked at its outer edge. The inner edge is absent, and the lip of the vessel unpreserved. Fine-grained orange fabric with a thin, semi-lustrous, burnished slip on the upper rim face (cf. **CA3001** and **PI3036**).

*Chronology.* The shape of the rim, insofar as it is preserved, may be likened to a example Hayes (*LRP* Fig. 22: 78.1) illustrates of his form 78—which, however, is generally smaller than the present example, and seems not to have been exported in quantity (Reynolds 1995: 19-26). Nor are the characteristics of the fabric consonant with those which Hayes describes. Perhaps more likely, on morphological as well as petrographic grounds, is an association with one of the variants of Hayes form 91, in which the present example would represent, not the rim, but rather the flange which constituted form 91's most characteristic feature. The size and downward-hooked profile of the present example may be compared with subtypes B and C, dated to the middle of the fifth and the middle of the sixth century CE, respectively (Bonifay 2004: 179). And the fabric and slip of the present example recall those of **PI3036**, a fragmentary Hayes (*LRP* 136) form 88A or B plate. As mentioned in connection with **CA3001**, these were manufactured primarily at Sidi Khalifa, ancient *Pheradi Maius*, which has been shown to have made some quantity of Hayes form 91 vessels as well (Ben Moussa 2007: 159).

82. **CA3011:** Frag. ARS bowl, form cf. Hayes 98 or 108.

*Context.* DU 2151, tracts 6-10 (Casa Abbadessa).

*Description.* Diam. 13cm, wall 0.46cm thick. Rim fragment of a late ARS bowl, thick-walled in relation to its size. Short thick flattened rim, slightly convex on its upper face. Coarse, granular fabric (2.5YR 5/8 - 6/8) in which small lime inclusions are the predominant impurity. Small vacuoles, likely the result of the explosion of the latter during firing, may also be seen. Thick, semi-lustrous slip (10R 5/8) on the interior surface, where it is finely brushed, and on the exterior at least to break.

*Chronology.* As Bonifay (2004: 185) has observed, distinguishing between examples of the Hayes's forms 98 (*LRP* 151-152) and 108 (p. 171) can be difficult, especially when with incomplete vessels. The present vessel is, on account of size, probably to be associated with either Bonifay's (2004: 185) subtype 98B (=Hayes 98B, n.2), dated grosso modo from the end of the fifth - middle of the sixth century CE, or 108, of seventh century date (Bonifay 2004: 187). The fabric and slip bear comparison with the sixth century products (mainly forms Hayes 95-97 and 99, in Carandini's (*Atl.* 78) D2 phase 2 fabric) of the pottery at Oudhna, ancient *Uthina* (on which the bibliography is extensive; see most recently Barraud *et al.* 1998). The earlier date seems thus to be likelier.

83. **GE3089:** Frag. ARS bowl form Hayes 99A or B. Illustrated (p. 303).

*Context.* DU 1055 (Genna).

*Description.* GPD 2.7cm, Diam. 24cm. Fragment of the rim of a Hayes (*LRP* 152-155) form 99A or B vessel. Tall (1.6cm), thick rim with a rounded lower aspect and thus no overhang. Sloping wall. Granular orange (2.5YR 7/8) fabric in which lime is the predominant impurity. Thick, semi-lustrous slip (2.5YR 5/8), erratically brushed on the interior surface and flaking on the exterior (cf. **GE3014**).

*Chronology.* Types A and B together span the entire sixth century CE (Bonifay 2004: 181).

84. **SL3007:** Frag. ARS bowl form Hayes 99A or B. Illustrated (p. 303).

*Context.* DU 2011, tract 3 (San Leonardo).

*Description.* Diam 18cm. Fabric and slip, cf. **GE3014**. Burned.

*Chronology.* 99A: end of the fifth - middle of the sixth century CE; 99B: 525 - 600 CE (Bonifay 2004: 181). In view of the height of the rim (1.6cm) and the presence of (faintly) visible brushmarks on the exterior below the rim, 99B is perhaps the better identification; but in either case, a sixth century CE date is appropriate.

85. **GE3014:** Frag. ARS bowl form Hayes 99A or B.

*Context.* GCU 6, -9 (grab find) (Genna).

*Description.* Diam. 16cm. Fragment of the rim and part of the wall of a Hayes (*LRP* 152-155) form 99 bowl. Heavy rolled rim and part of a sloping wall. Coarse brownish (2.5YR 5/8) fabric covered on the interior surface and the outside of the rim with a thick, semi-lustrous slip, erratically brushed on the interior surface and flaking on the exterior, of approximately the same color.

*Chronology.* The three main variants of Hayes form 99 (A, B, and C) constitute the flagship product (Barraud *et al.* 1998: 148) of the Oudhna potteries, which began production of a limited range of forms a little before the end of the fifth century CE (Barraud *et al.* 1998). The fabric and slip of the present example are like those of the Oudhna products (on which see **CA3011**). The shape of the rim is consistent with types A and B, which together span the entire sixth century (Bonifay 2004: 181).

86. **PI3056:** Frag. ARS bowl form Hayes 99B or C.

*Context.* DU 2211( grab find) (Piscitello).

*Description.* Diam. 17cm. Fragment of the rim of a Hayes (*LRP* 152-155) form 99 vessel, type B or C. Short (c. 1.4 cm), heavy rolled rim, below which only a very little (c. 0.1cm) of the wall is preserved. Coarse reddish-brown (2.5YR 5/6) fabric with a variety of well-sorted small inclusions visible in the matrix, lime predominant among them. Ubiquitous pitting of the vessel surface has carried off the majority of the (similarly colored?) slip, which is visible primarily on the inside of the rim, where it is thin and well-smoothed. A few flakes cling to the exterior rim face.

*Chronology.* 99B: 525 - 600 CE; 99C: end of the sixth - seventh century (Bonifay 2004: 181). The small size of the rim is incompatible (cf. Mackensen 1993a: Kat. 29.1 [=Hayes 99A]) with the A variant of this form, but further distinction between B and C variants is impossible on the basis of the exiguousness of what is preserved.



87. **SL3003**: Frag. ARS bowl, type cf. Hayes (*LRP* 152-155, 157-160) forms 99 and 103B. Illustrated (p. 303).

*Context*. DU 2010, tract 4 (San Leonardo).

*Description*. Diam. 25cm. Coarse pink-orange (between 10R 6/8 - 2.5YR 6/8) fabric in which lime grains of various sizes, some exploded leaving vacuoles, are the predominant impurity. Thick, semi-lustrous orange (2.5YR 6/8 - 7/8) slip on inside surface and outer rim face, whence it has almost entirely flaked away.

*Chronology*. The rim size (H 1.5cm) and shape is consistent with examples of both Hayes form 99B and 103B (cf. *LRP* Fig. 29: 103B.6), but at a diam. of 25cm, the vessel is larger than most examples of the former and smaller than is typical of the latter. That the present example cannot be assigned to one or the other of these two canonical shapes is not, however, too grave a problem; research at Oudhna has shown that alongside the classic types identified by Hayes there were produced a number of variants, one of which (cf. Barraud *et al.* 1998: Fig. 8: 4) is very near to **SL3003** in size. The chronology of this last cannot be stated with certainty, but must perforce fall within the dates established for ceramic manufacture at Oudhna, i.e., end fifth - seventh century CE (Barraud *et al.* 1998: 148). A mid-sixth century date—consistent, as it happens, with the chronology established for 99B (525 - 600 CE: Bonifay 2004: 181) and 103 (500 - 575: Hawthorne 1998: 268)—is probably appropriate.

88. **SL3016**: Frag. ARS bowl form Hayes 99.

*Context*. DU 2010, tract 2 (San Leonardo).

*Description*. GPD c. 2.7cm. Fragment of the rim and a little of the wall of a Hayes (*LRP* 152-155) form 99 bowl, the profile of which is difficult to assimilate to any of the three canonical variants he identifies. Tall (almost 2cm) rolled rim, the lower edge of which is less heavily lobed than is typical, instead nearly joining the wall at its lowest extent. Fabric (10R 6/8) and slip (10R 5/8), cf. **GE3014**.

*Chronology*. Research at Oudhna has shown that, alongside the classic 99 types identified by Hayes, there were produced a number of less frequent variants, of which the present example is likely to be one. Their chronology cannot be stated with certainty, but must perforce fall within the dates established for ceramic manufacture at Oudhna, i.e., end fifth - seventh century CE (Barraud *et al.* 1998: 148).

89. **GE3009**: Frag. ARS bowl form Hayes 100. Illustrated (p. 303).

*Context*. GCU 5, -3 (Genna).

*Description*. Diam. 19cm. Fragment of the rim and part of the wall of a Hayes (*LRP* 156) form 100 bowl. Thickened rim with a vertical inner face and a rounded upper surface and exterior, which extends very slightly (c. 0.12cm) past the wall below. Coarse orange fabric (cf. **GE3008**) with a smooth matte slip inside and on the upper surface of the rim, on which turning marks may be seen. The slipped inner surface bears faint brushmarks.

*Chronology*. 550 - 625 CE (Reynolds 1995: 31).

90. **GE3002:** Frag. ARS bowl form Hayes 101. Illustrated (p. 303).

*Context.* GCU -4, -1 (Genna).

*Description.* Diam. 18cm, wall 0.32cm thick below rim. Fragment of the rim and a little of the wall of a Hayes' (*LRP* 156) form 101 bowl. Preserved portion of the wall rises obliquely to meet the thickened vertical rim. This has a convex inner face and a slightly convex outer face, flaring slightly outward at its uppermost point. Light red (2.5YR 6/8) granular ware with notable lime inclusions and ubiquitous small vacuoles (cf. **CA3010** and **CA3011**). A thick, semi-lustrous red (between 10R 5.5/8 and 2.5YR 5.5/8) slip covers the inner surface and the exterior to a little above the break, where it appears to be thinning.

*Chronology.* Hawthorne (1998: 268) suggests a date from 540 - 610 CE, which encompasses both the probable beginning of the form's manufacture following the Byzantine reconquest of Africa in 533-534 and extends until shortly after 600, when Reynolds (1995: 31, 34) believed that it ceased to be very often exported. The proximity of western Sicily to Northern Africa counsels extending this *terminus ante quem* somewhat further into the seventh century.

91. **PI3011:** Frag. ARS plate form Hayes 104B. Illustrated (p. 308).

*Context.* DU 2207 (grab find) (Piscitello).

*Description.* Diam. 35cm. Fragment of the rim of a Hayes (*LRP* 160-166) form 104B plate. Heavy knobbed rim with a hooked lower edge. Coarse orange fabric with the remains of a thick, lustrous, and very flaky slip preserved on the inside surface of the vessel and to the lower edge of the outside rim face.

*Chronology.* Second half of the sixth century CE (Bonifay 2004: 183).

92. **GE3008:** Frag. ARS plate form Hayes 104B or 105. Illustrated (p. 308).

*Context.* GCU -2, -4 (Genna).

*Description.* Diam. 30cm, wall 0.67cm thick. Fragment of the rim and part of the wall of a Hayes (*LRP* 160-167, 167-169) form 104B or 105 plate. Rounded vertical rim, the inner face of which is offset slightly from the interior of the vessel, with which it is however nearly parallel. Thick, granular orange (2.5YR 6/8) fabric with a thin matte slip of approximately the same color covering the interior and the rim.

*Chronology.* Bonifay (2004: 183) dates form 104B to the second half of the sixth century CE, and form 105, *grosso modo*, to the following century (p. 185). A date of around the turn of the century is probably appropriate.

93. **GE3006:** Frag. ARS plate form Hayes 104C.

*Context.* GCU 3, -7 (Genna).

*Description.* GPD c. 3cm, wall 0.7cm thick. Diam. illegible. Fragment of the rim of a Hayes (*LRP* 160-166) form 104C plate. Thick walls rise very obliquely to an rounded, knobby rim, the uppermost part of which is broken, set off from the interior by a shallow groove. The exterior bears two grooves, the upper marking the junction of the rim and wall and the lower, rather shallower, a little below. Small-grained reddish (10R 5/8) ware in which frequent lime inclusions are visible against the dark

color the clay. Thick, smooth, semi-lustrous darker red (10R 4/8) slip on the inside surface and on the exterior to between the two incised grooves. Both surfaces show faint fine brushes marks and some evidence of flaking.

*Chronology.* Reynolds (1995: 31) and more recently Bonifay (2004: 183) have confirmed Hayes' (*LRP* 160-166) dating of this variant to the period between the middle of the sixth - middle of the seventh century CE. It is likely a North Tunisian product, but the place(s) of its manufacture—a "large D2 pottery", the products of which were first identified by Mackensen and Schneider (2002: 128)—remains to be located.

94. **CA3010:** Frag. ARS plate form Hayes 105A.

*Context.* DU 2141, tract 4 (Casa Abbadessa).

*Description.* Diam. 32cm. Fragment of the rim and part of the wall of a Hayes (*LRP* 166-169) form 105 plate, subtype A. The rim is heavy and basically square in profile, with a flat upper surface, a slightly convex exterior face, and a hanging lower edge. Thick, granular orange fabric with well-sorted small inclusions and acanty remains, on the inside surface, of a thin matte slip.

*Chronology.* Cf. Bonifay (2004: Fig. 98: 8), which the author describes as an example of subtype A of Hayes' form 105 and dates to the end of the sixth - first half of the seventh century CE. Form 105 was, in its various forms, probably the best-distributed of the late sixth - seventh century CE forms (Reynolds 1995: 33).

95. **SL3031:** Frag. ARS plate form Hayes (*LRP* 166-169) 105A or B. Illustrated (p. 309).

*Context.* DU 2011, tract 4 (San Leonardo).

*Description.* Diam. c. 34cm. Fabric (2.5YR 5/8) and slip (10R 7/8), cf. **CA3010**.

*Chronology.* 105A: end of the sixth - first half of the seventh century CE. 105B: Middle decades of the seventh century (Bonifay 2004: 185).

96. **PI3028:** Frag. ARS plate form Hayes (*LRP* 166-169) 105B. Illustrated (p. 309).

*Context.* DU 2206, tract 3 (Piscitello).

*Description.* Diam. 37 - 38cm. Extremely coarse, porous sandwich-type fabric (10R 6/8 at clay surface, 2.5YR 6/4 - 6/6 in section) in which small lime inclusions are the predominant impurity. The thin red (10R 4/8 - 5/8) slip, which covers only the inside surface and exterior rim face, is similarly variable in respect of its color: indeed, the rim face looks a little grey (towards 10R 5/3). The slip surface is rough and grainy, in part on account of the eruption of various inclusions through it.

*Chronology.* Middle of the seventh century CE (Bonifay 2004: 185). This may, like **PI3009**, be an example of a vessel produced in Bonifay's (1983: 305-306) D3 ware.

97. **PI3009:** Frag. ARS plate form Hayes 105B or C. Illustrated (p. 309).

*Context.* DU 2205 (grab find) (Piscitello).

*Description.* Diam. 35cm. Fragment of the rim of a Hayes (*LRP* 166-169) form 105 plate, more specifically of a sort which bears comparison with the variants B and C

identified by Bonifay (2004: 185). Thick (8cm), faintly rounded wall flares to a knobbed rim, ovular in cross-section, with a heavy projection on its lower extreme. Granular orange (2.5YR 7/8) ware with many small inclusions and notable vacuoles. The much darker (2.5YR 5/8) slip, below which the fabric surface appears almost tan—is thickly applied to the interior surface, which is lustrous if a little grainy, and much thinner on the exterior, which is visibly streaky. The slip on the exterior rim face has flaked almost entirely off.

*Chronology.* The chronology of the two variants encompasses the approximately fifty years between the middle and the end of the seventh century CE (Bonifay 2004: 185). The former, it is worth noting, is known to have been among the shapes in a late African fabric which Bonifay, on the basis of his work with Pelletier (1983: 305-306) in Marseille, calls D3. Its characteristics—especially in respect of the porosity of the ware and the projection of granules through the slipped surface—are consistent with those of **PI3009**, which may be an example. the chronology assigned to examples of the ware is not, in any event, inconsistent with that suggested on typological grounds.

98. **SL3015:** Frag. ARS dish, type cf. forms Hayes (*LRP* 166-169, 169-171) 105B and 106.

*Context.* DU 2010, tract 2 (San Leonardo).

*Description.* GPD c. 3cm, diam. illegible, but quite large. Fragment of a large, open, thick-walled (c. 0.9cm) late ARS vessel, probably either Hayes form 105B or 106. Heavy rolled rim, the upper surface of which is flat and inclined in line with the straight vessel wall, from which it is demarcated by a groove. The underside of the rim is nearly hemicircular, hanging, at its lowest point, a little below the vessel wall. Fabric (10R 6/8 - 7/8) and slip (10R 6/8), cf. **GE3021**.

*Chronology.* The shape of the rim is grosso modo consistent with examples of both Hayes forms 105, specifically the B type identified by Bonifay (2004: 185) (cf. *LRP* Fig. 32: 105.8), and 106 (cf. *LRP* Fig. 32: 106.1). Of the two, form 105B is perhaps the likelier. The groove observed on the rim of the present example would be atypical of the latter type, the interior of which is usually unmarked. (Significantly, the few exceptions to this rule—among them Sagui 2002: Fig. 3: 8, 9—are classified as "105/106".) Regardless, their respective chronologies (105B: middle of the seventh century CE [Bonifay 2004: 185]; 106: c. 525 - 660 CE: Hawthorne 1998: 268) overlap substantially, rendering likely a seventh century CE date.

99. **PI3008:** Frag. ARS plate type Mackensen 31.2. Illustrated (p. 309).

*Context.* DU 2205 (grab find) (Piscitello).

*Description.* Diam. 40 - 42 cm. Straight flaring wall with knobbed, downturned rim. Coarse orange fabric with a thick, well-burnished slip of the same color on the inside surface and to the underside of the rim.

*Chronology.* Mackensen's (1993a: 346) form 31.2 (=Fulford 1984: 74, Fig. 21: 68.1-3) is grosso modo similar to the more common Hayes (*LRP* 169-171) form 106, from which Mackensen distinguishes it on morphological grounds, and like form 106 is typical of seventh century CE contexts. Whether its production began as early as Reynolds

(1995: 31) has suggested for form 106, however, is at present doubtful: a *terminus post quem* in the last decades of the sixth century is more probable.

100. **PI3052**: Frag. ARS flask (?), type cf. Hayes 147, *Atl.* Tav. XXXI: 18. Illustrated (p. 304).

*Context.* DU 2207 (grab find) (Piscitello).

*Description.* Diam. of body 24cm. Coarse pinkish (10R 6/8) fabric. The exterior surface bears a thick, lustrous, finely bruised orange (2.5YR 5/8 - 6/8) slip. The interior surface is unslipped and unfinished: turning marks are visible in the rough surface.

*Chronology.* Both Hayes (*LRP* 185) 147 (produced in A1, A1/2, and A2 fabrics: *Atl.* 77) and *Atl.* tav. XXXI: 18 (its analogue in D fabric) are dated to the second - third century CE. The present example, which is rather larger than either, should nevertheless be dated similarly: the exportation of closed ARS vessels was never a numerically significant phenomenon, but its apex appears to correspond, *grosso modo*, to this moment.

101. **GE3026**: Frag. ARS plate form Hayes 50B or 62B.

*Context.* GCU 3, -7 (Genna).

*Description.* Diam. 27 - 28cm, wall 0.66cm thick. Rim and part of the wall of a Hayes (*LRP* 69-73, 107-109) form 50B or 62B plate. Nearly straight wall rising at a 60° angle, approximately, to a simple rounded rim, faintly bevelled on the inner and outer faces. Fine-grained orange (2.5YR 6/8) fabric in which small, well-sorted lime and sand particles are visible. Covered on the inside surface with a matte pinkish (2.5YR 7/6) slip bearing some evidence of smoothing where not so thin as to appear to fuse with the body clay. The exterior is unslipped and bears evidence of smoothing.

*Chronology.* 50B: 350 - 400 CE; 62B: 350 - 450 CE (Hawthorne 1998: 267). The profile and fabric (typically, Carandini's C2 [*Atl.* 58-59] and/or C3 [*Atl.* 61, 65]) are consistent with either possibility, whereas the size is more typical of form 50B. It is possible that forms 50B and 62B represent two stages in the development of a single form (Reynolds 1995: 6), in which case their respective chronologies encompass a continuum of typological development.

102. **SL3023**: Frag. ARS vessel, type cf. forms Hayes 67-69, 76.

*Context.* DU 2011 (grab find) (San Leonardo).

*Description.* GPD c. 2.5cm. Fragmentary element of an ARS vessel rim—specifically, the lip of the vessel proper at its juncture with an everted rim of indeterminate width—probably corresponding to a dish of form 67, 68, 69, or 76, as described by Hayes. Fabric (10R 7/8) and slip (10R 6/8 - 7/8), cf. **PI3019**.

*Chronology.* The several possibilities suggested by the portion of the vessel remaining have varying, but more or less contiguous, chronologies spanning basically the latter half of the fourth century - end of the fifth century CE (Hawthorne 1998: 267).

103. **GE3017**: Frag. ARS plate form Hayes 90B or 105A. Illustrated (p. 304).

*Context.* GCU -3, -5 (Genna).

*Description.* Diam. 37cm. Fragment of the rim of a plate of Hayes form 90B or 105. Heavy quadrangular rim with a vertical outer face and upper and lower faces oriented basically parallel with the vessel wall, of which only a very little is preserved. The wall is notably thin relative to the rim. Coarse brownish (2.5YR 6/8) fabric in which a range of inclusions may be seen. A thick, flaky slip, a little darker in color, covers the interior and the rim.

*Chronology.* The dates of form 90B (second half sixth - seventh century CE) and form 105A (end sixth - first half of the seventh century CE) overlap substantially; indeed, it now seems clear that the former developed into the latter (Bonifay 2004: 177, 183). The present example boasts a rim which is consistent with those of form 105A, but the preserved portion of the wall is thinner than is typical, in this respect resembling form 90B.

104. **DB3005:** Frag. ARS ring base. Illustrated (p. 304).

*Context.* DU 2303, tract 1 (Ditta Barbagallo).

*Description.* P. H 1.5cm, diam. base 7cm. Fragment of the base, floor, and part of the wall of an early-type ARS bowl. Bevelled ring base. The wall rises abruptly from its juncture with the base to the break. The transition from the wall to the floor is marked, on the interior, by a slight offset located above the inner edge of the base, within which the floor descends more shallowly to the break. Fabric and slip, cf. **DB3020**.

*Chronology.* Ring bases of the sort illustrated here are characteristic of the ARS forms dating to the first - third centuries CE, grosso modo (i.e., Hayes [LRP 18-43] forms 1-11 and 13-17). On account of the smoothly vertical inclination of its wall, however, the present example is more properly compared with the late second - third century CE forms—basically 14-17—than with the earlier series of first - mid-second century bowls, 1-10. The latter tend, in the main, toward a profile in which the wall rises more obliquely from the base to a more-or-less marked carination, beyond which the wall becomes more steeply vertical.

105. **GE3044:** Frag. ARS ring base. Illustrated (p. 304).

*Context.* GCU 5, -3 (Genna).

*Description.* P. H c. 1.1cm, diam. 5.5cm. Fragment of the base, floor, and lower part of the wall of an early ARS bowl. Ring base, bevelled on its exterior face. The wall rises shallowly following, at least til the break, the line established by the floor, with which no offset is notable on either the outside or inside surfaces. Coarse orange (2.5YR 6/8) fabric with a similarly-colored slip, well-smoothed on both inside and outside.

*Chronology.* Cf., in general, **DB3005**; the relevant comparanda are basically the same. As such, a date between the late first and early third century is appropriate.

106. **SL3036:** Frag. ARS ring base. Illustrated (p. 304).

*Context.* DU 2012, tract 1 (San Leonardo).

*Description.* Diam. base 7cm, p. H 1.7cm. Fine-grained pink-orange (2.5YR 6/8 - 7/8) fabric with a thick, lustrous, pimply orange (between 10R 6/8 - 2.5YR 6/8) slip on all preserved surfaces.

*Chronology.* Cf., in general, comments regarding **DB3005**. The relevant comparanda are grosso modo similar, resulting in a chronology encompassing the (probably late) first - third century CE.

107. **SL3040**: Frag. ARS ring base.

*Context.* DU 2012, tract 1 (San Leonardo).

*Description.* Diam. base 7.5cm. Fabric and slip, cf. **SL3036**. The present example is slipped in somewhat a lighter orange (toward 2.5YR 7/8) clay, and does not likely correspond to the same vessel.

*Chronology.* Cf., in general, comments regarding **DB3005**. The relevant comparanda are grosso modo similar, resulting in a chronology encompassing the (probably late) first - third century CE.

108. **SL3008**: Frag. ARS ring base. Illustrated (p. 304).

*Context.* DU 2011, tract 3 (San Leonardo).

*Description.* Diam. base. 14cm, p. H 1.1cm. Fabric (10R 7/8 - 2.5YR 7/8) and slip (10R 6/8), cf. **PI3051**.

*Chronology.* Cf. comments re **PI3051**. As in that case, Hayes (*LRP* 49-51) form 27 seems marginally the better identification, both on account of the characteristics of the ware and, to a lesser degree, the shape of the vessel as preserved.

109. **PI3051**: Frag. ARS ring base.

*Context.* DU 2207 (grab find) (Piscitello).

*Description.* Diam. base 12cm. Fragment of the base and part of the floor of what is probably a Hayes (*LRP* 49-51) form 27 plate (cf. for profile *LRP* Fig. 8: 27.2; **SL3008**, has a somewhat flatter floor). A low triangular foot is set outside the outer of two concentric grooves which decorate the vessel floor. The wall of the vessel flares from the base, rising gradually to the break. Granular orange (2.5YR 7/8) fabric with some large quartz and ceramic (?) inclusions. Thin, dull brownish (2.5YR 5/8) slip all over.

*Chronology.* Third century CE (Bonifay 2004: 159). This is perhaps an example of the shape as produced in late A fabric, rather than A/D (cf. **GE3003**).

110. **PI3057**: Frag. ARS ring base.

*Context.* DU 2211 (grab find) (Piscitello).

*Description.* Diam. base 18cm. Flat floor resting atop a low, rounded foot. The vessel is broken, at its outer edge, at what appears to be a point of carination, whence the wall should turn more nearly vertical. Granular orange (2.5YR 6/8 - 7/8) fabric which is slightly greyer in section. A smooth, lustrous, slightly mottled orange (2.5YR 5/8) slip covers all preserved surfaces.

*Chronology.* The profile and dimensions of the current example bear comparison with those of the bases typical of the third century CE (Bonifay 2004: 159) forms Hayes (LRP 49-51, 52-55) 27 and 31, of which the latter (cf. esp. LRP Fig. 9: 31.6) is perhaps the likelier identification.

111. **GE3013:** Frag. ARS base type cf. forms Hayes 45 and 46. Illustrated (p. 304).

*Context.* GCU 3, -2 (grab find) (Genna).

*Description.* P. H c. 1cm, diam. base 12cm. Fragment of the base and wall of, probably, a Hayes (LRP 62-65) form 45 or 46 dish. Flat base resting on a very shallow triangular foot, whence rises the wall of the vessel at a very shallow angle. Fine-grained light red (2.5YR 5/8 - 6/8) fabric in which some small lime and quartz particles are visible. Clay everywhere covered by a warmer-toned (tending toward 10R 5/8) slip which is thin, glossy, and slightly mottled. The exterior is a little pimply.

*Chronology.* The profile is typical of the base of Hayes form 45 and 46 dishes, with which the present example also compares in respect of the characteristics of the ware; cf. esp. those examples manufactured in the variety of C1 fabric typical of Henchir el-G(u)ellal (Djilma) (Mackensen & Schneider 2006: 187; Peacock, Bejaoui & Ben Lazreg 1990). Form's 46 dates to a period (275 - 325 CE: Hawthorne 1998: 267) subsumed entirely within the chronology of the several variants of form 45 (230 - 350 CE for variants A, B, and C: Hawthorne 1998: 267)—distinguished on the basis of the shape of the rim, absent in the present case—but it would be in either event the less probable identification: form 45 was always much more common in the western Mediterranean (Reynolds 1995: 15-16). Given the quality of the slip and the totality of its coverage, a mid- or late-third century date is probably appropriate. Ceramic production at Henchir el-G(u)ellal (Djilma) was certainly underway by the middle of the century (Mackensen 1993a: 37), and may indeed have begun as early as its first quarter (Mackensen 2006).

112. **PI3025:** Frag. ARS base type cf. form Hayes 67.

*Context.* DU 2205, tract 3 (Piscitello).

*Description.* Diam. base 12cm. Fragment of the base of a large, thick-walled ARS vessel, the interior of which bears two or three (?) shallow concentric grooves. Flat base with a small triangular foot defined by a groove near the edge of the base. Sandy pinkish (10R 6/8) fabric in which some small lime and quartz grains may be seen, covered with a semi-lustrous red (10R 5/8 - 6/8) slip on the inside surface.

*Chronology.* Bases of this sort are typical of dishes of Hayes (LRP 112-116, 116-117) forms 67 and 68. The latter—at least in its canonical "E" fabric—is unlike the sherd under discussion. As such, form 67 is the likelier identification. Its several variants encompass a period between c. 360 - late fifth century CE (Bonifay 2004: 173).

113. **PI3006:** Base frag. of an ARS plate form Hayes 68. Illustrated (p. 305).

*Context.* DU 2205 (grab find) (Piscitello).



*Description.* P. H 0.9cm, Diam. base 25cm. Frag. of the base and decorated floor of a Hayes (LRP 116-117) form 68 dish. Impressed in the preserved portion of the floor are two close-set grooves, bracketed on either side by a course of rouletting (=Hayes [LRP 282] "double-rouletted band"). The base is flat, with a groove near the outer edge setting off a small molding as a false foot. Fine brown (2.5YR 5/6 - 5YR 5/6) fabric in which small lime particles, sometimes exploded to produce a tiny vacuole, are the only visible impurity. The smooth, semi-lustrous reddish-brown (2.5YR 6/8) slip covers the interior surface. Twig-marks visible under preserved portion of base.

*Chronology.* 370 - 450 CE (Hawthorne 1998: 267). It is instructive to compare the present example with the two other possible fragments of form 68 catalogued herein (cf. **GE3070** and **PI3019**). The characteristics of this fragment's ware and slip are those of Carandini's (*Atl.* 119) E fabric, in which the shape was first and most typically produced. While the potteries responsible for producing form 68 have yet to be identified, the distribution of finds in E fabric suggests that they should be located in South Tunisia, perhaps around the Gulf of Gabes (Bonifay 2004: 51).

114. **GE3050:** Base frag. of an ARS dish, type cf. Hayes forms 103 and 104.

*Context.* GCU 5, -3 (Genna).

*Description.* Diam. at junction of wall and fragmentary foot, c. 16cm. Fragment of the base and floor of a large, late ARS open dish, probably Hayes (LRP 157-160, 160-166) form 103 or 104A. Thick, heavy, medium-high ring base with a slightly convex outer face; the profile inside the foot is not preserved (cf. LRP Fig. 29: 103A.3). This is slightly offset from the thick (c. 0.8cm) vessel wall. Fine-grained orange fabric (2.5YR 7/8), reduced at its core, with small grains of lime prominent in the matrix. Thick, lustrous red (10R 4/8 - 5/8) slip on inside surface; the exterior is nude, albeit smooth. The irregularity of the clay and slip color may indicate that the vessel was either poorly fired or burned.

*Chronology.* 103: 500 - 575 CE (Hawthorne 1998: 268); 104A: end fifth - middle of the sixth century (Bonifay 2004: 183). Grosso modo, a sixth century CE date is probably appropriate.

115. **GE3021:** Frag. ARS base type cf. forms 105 and 106.

*Context.* GCU -1, 1 (Genna).

*Description.* Diam. base 12cm. Fragment of the base and part of the wall of a Hayes (LRP 166-171) form 105 or 106 plate. Low, heavy ring base adjoining a thick wall rising shallowly to where broken. The interior of the vessel is undecorated. Coarse orange (2.5YR 6/8) fabric with a variety of small inclusions and frequent small vacuoles. The remains of the slip, thin to the point of fusing with the body clay, are visible on the interior, the surface of which is nevertheless rough. The exterior is unslipped and evidently smoothed.

*Chronology.* This sort of base is characteristic of a variety of large forms (cf. 103B, 104-106) dating to the latest phase of ARS production. The quality of the slip, however, and the apparent absence of decoration on the vessel floor, are more consistent with forms 105 (end sixth - seventh century CE: Bonifay 2004: 185) and 106

(c. 525 - seventh century CE: Fulford & Peacock 1984: 74 [=F67]; Reynolds 1995: 31), rendering a seventh century date most plausible.

116. **GE3073:** Wall frag. of an ARS bowl, type cf. Hayes forms 4 and 8.

*Context.* GCU 5, -1 (Genna).

*Description.* GPD 3cm. Fragment of the wall of an ARS vessel, prob. Hayes (*LRP* 25-26, 33-35) form 4 or, more likely, 8. Straight, slightly flaring wall with a groove at the uppermost preserved part of the inside surface. Opposite, on the exterior, is what appears to be the lowest part of a small convex molding. Coarse fabric with a thick, lustrous, slightly pimply slip bearing fine brush marks on both interior and exterior surfaces.

*Chronology.* The present example bears comparison with an example of form Hayes 4B (*LRP* Fig. 2: 4B.14) as well as form 8 more generally. The latter possibility is much the likelier, both on account of the apparently small size of the fragmentary convex molding on the exterior wall—a fact which brings it into closer consonance with the low ridge characteristic of form 8's tripartite rim than the somewhat larger and thicker rim of form 4—and on account of form 8's greater commonality. The chronology of the two forms (4: 80 - 175 CE; 8: c. 90 - early third century CE: *Atl.* 26; Hawthorne 1998: 266) is in any event similar.

117. **PI3015:** Frag. ARS vessel, type cf. forms Hayes 5 or 8. Illustrated (p. 305).

*Context.* DU 2207 (grab find) (Piscitello).

*Description.* Diam. at internal offset, 13 - 15cm. Granular orange (2.5YR 5/8 - 6/8) fabric with a thick, lustrous, slightly mottled slip (10R 5/8 - 6/8) exhibiting fine tooling marks inside and out.

*Chronology.* The profile as preserved is consistent with examples of Hayes (*LRP* 26-29, 33-35) forms 5 (70 - 125 CE: Hawthorne 1998: 267) and 8 (late first - early third century CE: *Atl.* 26; Bonifay 2004: 156), of which the latter is the more likely, given its greater frequency. A second century chronology is most probable.

118. **GE3035:** Frag. of the wall of an early ARS vessel, type cf. Hayes forms 7, 8A, and 9A.

*Context.* GCU 3, -1 (Genna).

*Description.* GPD 4.6cm. Straight flaring wall turning inward toward the floor at a marked point of carination. The carination is bracketed by a line of rouletting above and another below. Fine, slightly granular pink (10R 6/7) fabric with a thick, lustrous, well-smoothed red (10R 5.5/8) slip on inside and outside surfaces.

*Chronology.* The profile is grosso modo consistent with forms 7 (*LRP* 31-33), 8A (*LRP* 33-35), and 9A (*LRP* 35-37) as defined by Hayes. All are consistent with a date situated in the second half of the second century CE.

119. **GE3083:** Wall frag. of an ARS vessel type cf. Hayes form 9A.

*Context.* GCU 3, -7 (Genna).

*Description.* GPD 2.4cm. Fragment of the wall of an ARS vessel, prob. form Hayes (LRP 35-37) 9A. A band of rouletting runs between two parallel grooves, beyond which little of the vessel wall is preserved. Reddish (10R 6.5/8) with a similarly colored, though slightly darker (10R 5/8), slip on inside and outside surfaces.

*Chronology.* 100 - 160 CE (Hawthorne 1998: 266).

120. **PI3037:** Wall frag. of an ARS vessel with a wide vertical groove impressed on the outer wall.

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* GPD c. 1.4cm. Small fragment of the wall of an ARS vessel, the only identifying feature of which is an incomplete groove, running approximately perpendicular to the direction of turning, impressed on the outer vessel wall. Coarse, rough pinkish (10R 6/8) fabric in which a variety of small inclusions may be seen. The inside surface exhibits a thin, dull slip, while the exterior is bare and smooth aside from frequent pocking.

*Chronology.* Such decoration is most characteristic of Hayes (LRP 96-100) form 59A dishes, with which the present example bears comparison in respect of the characteristics of its fabric and slip. Form 59A is dated 320 - 400 CE (1998: 267).

121. **PI3063:** Wall frag. of an ARS vessel with a wide vertical groove impressed on the outer wall.

*Context.* DU 2206 (grab find) (Piscitello).

*Description.* GPD 2.9cm. Smoothly rounded wall fragment with a groove in the exterior surface, perpendicular to the direction of turning. Red-brown (2.5YR 4/8) fabric with a red (10R 5/8 - 6/8) slip

*Chronology.* Cf. comments concerning **PI3037**.

122. **GE3088:** Frag. of the handle of an ARS vessel.

*Context.* DU 1054 (Genna).

*Description.* GPD 1.5cm. Fragment of the handle of an ARS vessel, the identity of which cannot be stated, as no part of the vessel proper has been preserved. Ovular cross-section with two shallow parallel grooves on the outside face of the handle (cf. e.g. *Atl. tav. XXI: 5*; the profile is exceptionally common). Coarse orange (between 10R 6/8 - 2.5YR 6/8) fabric with a thick, lustrous, slightly pimply slip of similar color.

*Chronology.* While it is impossible to ascertain the nature of the vessel to which this fragment was attached, at least in specific, it is more generally true that only a limited range of ARS shapes ever bore handles. They constitute, in the main, an early series of jugs, feeder-bottles, and cups produced in Carandini's (*Atl. 19*) A fabric (*Atl. 21, LRP 17*; Salomonson 1968). None appear to be later than the third century CE.

123. **GE3047:** ARS vessel frag. with stamped decoration of type Hayes A(i) or A(ii). Illustrated (p. 305).

*Context.* GCU 5, -3 (Genna).

*Description.* GPD c. 2.7cm. Granular orange (2.5YR 6/8) fabric with a thick, smooth, semi-lustrous light red (10R 6/8) slip on the interior surface. The underside of the vessel is unslipped and quite eroded.

*Chronology.* The stamp in question is Hayes' (*LRP* 229, cf. Fig. 38: e) motif number 3, typically a component of style A(ii) and, more rarely, style A(i) decorative schemes and dating, in the main, to the second half of the fourth century CE.

124. **CA3005:** ARS vessel frag. with stamped decoration of type Hayes A(ii) or A(iii). Illustrated (p. 305).

*Context.* DU 2139, tract 2 (Casa Abbadessa).

*Description.* GPD 1.5cm. Fragment of the floor of an ARS vessel, the interior of which bears an incomplete stamp consisting in two concentric circles, the larger of which is surrounded by a rouletted fringe of alternating square and linear impressions. Granular orange (2.5YR 6/8) fabric. Traces of a thick, smooth orange (2.5YR 5/8) slip are preserved on the interior surface. The latter is unslipped and unmarked.

*Chronology.* Cf. Hayes' (*LRP* Fig. 40: m, n) stamps 31 and 32, belonging to his style A(ii) and A(ii) or A(iii) decorative schemes, respectively (pp. 218-219). Stamp 31 is frequent from the late fourth - early fifth century CE, and stamp 32, from the late fourth - mid fifth century. Hayes (*LRP* 236) observes that examples of the latter stamp type tend to grow larger with the passage of time. The present example, which is relatively small, is likely to be no later than the early fifth century.

125. **GE3093:** ARS vessel frag. with stamped decoration of type Hayes E(ii). Illustrated (p. 305).

*Context.* DU 1056 (Genna).

*Description.* GPD 6.5cm, p. H 2.5cm. Fragment of the floor and low, heavy ring base of a large (diam. base 19cm) open ARS vessel, the interior of which bears two close-set grooves delineating a field in which the remains of an incomplete stamp are visible. This consists in a row of at least three tiny relief circles (?) bracketed on either side by two incised lines. A curved line parts from the outer terminus of this figure, suggesting the contours of a human face. Coarse, granular pinkish orange (towards 10R 6/8) fabric with a thin matte slip of the same color on the inside surface. The outside bears fine smoothing marks, producing a faintly corrugated surface.

*Chronology.* Cf., mostly on the basis of the figure's collar, apart from which little is preserved, Hayes (*LRP* Fig. 52: n) stamp 262, which belongs to his style E(ii) decorative scheme (p. 222), dated to the period between c. 530 - end of the sixth century CE. Such a date is consistent with the chronology supplied by the vessel's typology: the size and shape of the base bear comparison with examples of Hayes (*LRP* 157-160, 160-166) forms 103A and 104A and B, which are, in the main, sixth century forms (Hawthorne 1998: 268). They appear mostly (cf. Ben Moussa 2007; Bonifay 2004: 203-205 concerning a production of the former at Sidi Khalifa) to be

products of one or more of the still-unlocated D2 potteries in North Tunisia (Mackensen & Schneider 2002: 128).

126. **SL3012**: Frag. of the base of an ARS vessel, decorated inside with Hayes' (*LRP* 281) "quintuple groove". Illustrated (p. 305).

*Context*. DU 2007 (San Leonardo).

*Description*. Diam. base 16cm, p. H. Coarse brownish (2.5YR6/6, core 2.5YR 6/4) fabric with a thin matte orange (2.5YR 6/8) slip on the interior surface. Possibly burned.

*Chronology*. The "quintuple groove"—as seen here, an arrangement of five grooves delineating the floor of the vessel—is commonly found on a variety of fourth- and fifth century forms (cf. i.a. *LRP* Fig. 16: 61.7, Fig. 17: 61.13, Fig. 19: 67.17), primarily in concert with style A stamped decoration. The present example is, in view of the shape and size of the base, most likely an example of Hayes (*LRP* 112-116) form 67.

127. **GE3068**: Frag. of the floor of a thin-walled ARS vessel with internal feather rouletting, type cf. Hayes form 53B. Illustrated (p. 305).

*Context*. GCU 5, -1 (Genna).

*Description*. GPD 2.8cm. Fragment of the base of an ARS vessel, the interior of which is decorated with feather rouletting. The incised decoration is relatively fine. The exterior includes a portion of the low triangular base (diam. c. 5 - 6cm). Fine pure orange ware with a semi-lustrous slip on the inside surface and a finely smoothed, unslipped exterior.

*Chronology*. The variety of decoration seen here, described by Hayes (*LRP* 282-283) as "feather rouletting", is seen on a limited range of forms, comprising basically the B variant of his form 53 (*LRP* 78-82) and the several variants of his form 91 (*LRP* 140-145). The characteristics of the ware employed in the manufacture of the former type—i.e., Carandini's (*Atl.* 59) C3 fabric—are, however, a better match for those noted in the present case, arguing for an identification with form 53B. The type is dated from 370 - 430 CE (Hawthorne 1998: 267).

128. **SL3022**: Frag. of the floor of an ARS vessel with internal feather rouletting, type cf. Hayes form 91. Illustrated (p. 306).

*Context*. DU 2011 (grab find) (San Leonardo).

*Description*. GPD c. 3cm. Cf. **PI3024** and **PI3054**.

*Chronology*. Cf. comments on **PI3024**.

129. **PI3024**: Frag. of the floor of an ARS vessel with internal feather rouletting, type cf. Hayes form 91A or B.

*Context*. DU 2205, tract 3 (Piscitello).

*Description*. GPD 3.3cm, wall 0.6cm thick. Fragment of the floor of what is probably a Hayes (*LRP* 140-145) form 91A or B bowl. At least two bands of overlapping rouletting, together producing a "feathered" effect of the sort described by Hayes

(LRP 282-283), cover the entirety of the interior surface. Fine-grained (2.5YR 6/6 - 7/6) fabric. A thin matte slip, reddish in color, is just visible on the interior surface of the vessel. The unslipped exterior is smooth.

*Chronology.* Of the limited range of forms on which decoration of this sort typically appears (cf. **GE3068**), form 91 is most likely to display the dimensions and ware characteristics of the sherd under discussion. As Hayes (LRP 282-283) explains, the passage of time—and the evolution of type A into types B, C, and D, on which such decoration is often absent—saw a diminution in the size, and a deterioration in the quality, of the rouletting in the vessel floor. That visible on the present example ought to correspond to one of the two earlier types, namely 91A (first half of the fifth century CE) or B (middle of the fifth century CE) (Bonifay 2004: 179).

130. **PI3054:** Frag. of the floor of an ARS vessel with internal feather rouletting, type cf. Hayes form 91A or B.

*Context.* DU 2207, tract 2 (Piscitello).

*Description.* GPD 3.4cm. Decoration, fabric and slip, cf. **PI3024**.

*Chronology.* Cf. comments on **PI3024**.

3. *Phocaeen Red Slip*. 1 fragment.

1. **SL3027:** Frag. PRS bowl form Hayes 3E or F. Illustrated (p. 309).

*Context.* DU 2011, tract 1 (San Leonardo).

*Description.* Diam. c. 30cm. Fragment of the rim of a PRS bowl form Hayes (LRP 329-338) 3E or F: it is often difficult to differentiate between the several subtypes (cf. esp. LRP Fig. 69: 3F.17). Vertical rim face, slightly convex, with a projecting lowed edge and a rounded lip. The interior is carinated at a point opposite the middle of the exterior rim face. Fine, pure, red-brown (2.5YR 5/ - 6/8) fabric in which small particles of lime may be seen. The thin matte slip is visible primarily on the small portion of the interior surface preserved below the carination mentioned above; elsewhere, it has either disappeared or fused with the body clay.

*Chronology.* Late fifth - mid sixth century CE (LRP 337-338).

4. *Lamps*. 15 fragments.

1. **PI3066:** Frag. of the handle and part of the discus of an African (?) lamp, type Deneauve VII.

*Context.* DU 2206, tract 2 (Piscitello).

*Description.* GPD c. 4.8cm. Handle and fragmentary shoulder and discus of a Deneauve (1969) type VII lamp, more specifically of the sort classified by Bonifay (2004: 322) as his type B4 (=Deneauve VII), variant A, characterized by an undecorated shoulder. Rounded handle, doubly grooved along its spine and pierced through its center, rises vertically from a narrow, sloping, apparently undecorated shoulder. The handle is flanked, at its juncture with the shoulder, by two impressed circles. The discus, which is marked off from the shoulder by a single groove, bears fragmentary decoration resembling leaf or a sheaf of wheat (?). Fabric and slip, cf.

**PI3049**, than which the present example is rather paler (fabric between 2.5YR 7/6 - 5YR 7/6).

*Chronology.* Bonifay's (2004: 322) variant A is the earliest incarnation of the type, dating to the first half - middle of the second century CE.

2. **PI3062:** Frag. of the shoulder of an African lamp, form Deneauve (1969) VII. Illustrated (p. 306).

*Context.* DU 2206 (grab find) (Piscitello).

*Description.* Diam. discus c.4.2cm, W shoulder c. 1.6cm. Granular sandwich-type fabric (5YR 7/6 clay surface, 5YR 7/1 section) with the remains of a grey-brown slip.

*Chronology.* Deneauve VII is divisible into two subtypes, both of which are plausible. VII 1 (=Bonifay [2004: 322] type B4): first half second - first quarter of the third century CE. Deneauve VII 2 (=Bonifay [2004: 322] type B5): second half of the second - first third of the third century CE. Chronologically speaking, the distinction is of minimal significance.

3. **PI3016:** Frag. of the nozzle of an African (?) lamp decorated with an impressed circle and chevrons.

*Context.* DU 2211 (grab find) (Piscitello).

*Description.* GPD c. 2.5cm, diam. discus c. 2.5cm. Granular tan (7.5YR 7/6) fabric with the remains of a reddish-brown (10R 5/7) slip on the exterior surface.

*Chronology.* For the type in African fabric, of which **PI3016** is plausibly an example, cf. (Deneauve 1969: n. 732), an example of the author's type VII, corresponding to Bonifay's (2004: 325) B7, dated grosso modo to the third century CE.

4. **GE3036:** Frag. of the shoulder and discus of an African (?) lamp, type cf. Bonifay 9. Illustrated (p. 306).

*Context.* GCU 3, -1 (Genna).

*Description.* Diam. discus c. 6cm. Fragment of the shoulder and discus of a lamp in granular buff (7.5YR 7/4 - 8/4) fabric with the remains of a grey-brown (10R 4/1) slip preserved mostly in the recessed areas of impressed decoration. This consists in at least one course of parallel lines on the shoulder and a row of radial spokes on the outer portion of the discus. Off-center filling hole and a break corresponding to a molded central device.

*Chronology.* Bonifay (2004: Fig. 183) assigns a near-identical lamp to his type 9 (=Deneauve [1969] VII subtype 6), for which the dating evidence is scanty: the lamp in question emerged from a tomb of the second half of the third century CE (Bonifay 2004: 329). In light of this paucity of evidence, Rossiter (2009: 95) is inclined to assimilate the class to the more common Bonifay (2004: 322) type 5 (=Deneauve VII subtype 2), which is frequent during the second and third centuries CE.

5. **PI3040:** Frag. of the decorated discus of a lamp. Illustrated (p. 306).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* GPD 3.2cm. Fine, hard, somewhat micaceous greyish-red (10R 6/2) fabric, apparently burned. The fragmentary device appears to be a seated infant with wings and a trumpet (cf. Deneauve 1969: pl. LXVIII: 719 ["génie ailé"], and *Suppl.* pl. 24: 234), likely a cupid.

*Chronology.* The cited comparanda date to the early second and late first century CE, respectively, but such devices are likely to have subsisted at least into the third century or perhaps even fourth century, when figured discus motifs became increasingly uncommon. It is difficult to be much more specific.

6. **GE3029:** Frag. of the shoulder of an African (?) lamp decorated with globules in relief.

*Context.* GCU 3, -7 (Genna).

*Description.* W shoulder 1.7cm. Fragment of the shoulder of a lamp, possibly of African manufacture, decorated with two rows of globules set within a channel in the shoulder (cf. **PI3030**). Both the channel and the globules are in low relief and relatively indistinct. Fine-grained light brown (5YR 6/4) fabric with heterogeneous small inclusions among which lime is predominant and a great many small vacuoles are notable. The outer surface has been whitened by the application of a salt glaze.

*Chronology.* Lamps decorated thus are characteristic of the African range of products which preceded the better-known varieties made in sigillata. The present example bears comparison with Deneauve's (1969) class VIII, sub-type 4, though not in respect of the slip: Deneauve's products are routinely brown-slipped (Rossiter 2009: 94). Bonifay (2004: 343) has demonstrated that these lamps—his type 13, dated to the third century CE (p. 334)—were in fact produced for a much greater length of time than was at first realized. His type 32 comprises the late fourth - fifth century CE series of lamps with identical, though much less carefully applied, decoration (Bonifay 2004: 349), and often no slip. The present example more closely resembles the latter type, though with respect to the chronological implications of this fact, it is worth recalling that no solution of continuity is demonstrable between the manufacture of type 13 and type 32 (Bonifay 2004: 349).

An alternative, though less compelling, possible identification is provided by Provoost's (1970: 24-25, 43-44) Sicilian-made type 4 lamp, dated to the third - fourth century CE. The fabric and slip of these products is typically quite different, however.

7. **PI3030:** Frag. of the shoulder of an African (?) lamp decorated with globules in relief. Illustrated (p. 306).

*Context.* DU 2206, tract 3 (Piscitello).

*Description.* W shoulder 1.9cm. Fabric and slip, cf. **GE3029**, than which the present example is a little pinker in respect of the color of the ware (2.5YR 7/6).

*Chronology.* Cf. comments regarding **GE3029**.

8. **SL3018:** Frag. of the shoulder of an African (?) lamp decorated with globules in relief.



*Context.* DU 2010, tract 3 (San Leonardo).

*Description.* GPD c. 1.7cm. Cf. comments regarding **GE3029**, the fabric of which is less red than the present example (10R 5/7)

*Chronology.* Cf. comments regarding **GE3029**.

9. **PI3042:** Frag. handle of an African (?) buffware lamp. Illustrated (p. 306).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* P. H 3.8cm. Sandy, well-levigated, warm buff (10R 8/2) fabric with scanty remains of a red-brown (10R 4/4 - 5/4) slip.

*Chronology.* At least among the "Roman-type" African series of lamps first described by Deneauve (1969), pierced trifold handles of the sort seen here are most common during the second and third century CE. The five or six (?) grooves on the lower aspect of the handle spine, on the other hand, are more typical of the fourth - fifth century CE "derived" forms identified by Bonifay (2004). The present example may be transitional.

10. **PI3049:** Frag. African lamp, type cf. Deneauve class IV or XA. Illustrated (p. 306).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* Diam. shoulder c. 5.5cm. Fine, hard, somewhat sandy red (10R 5/8) ware with a red-brown (10R 5/6 - 10R 5/8) slip. Two grooves on the shoulder. Apparently an airhole on the nozzle, between the wickhole and the shoulder region: its placement coincident with the line of fracture renders it difficult to be certain.

*Chronology.* The two classes of lamp with which the present example may be compared have widely varying chronologies between which it is difficult to choose. Deneauve class IV lamps (cf. esp. Deneauve 1969: n. 283, 287) date to the first half of the first century CE and are, largely if not exclusively, imports in the context of the African sites on the basis of which Deneauve's typology was constructed. The present example, meanwhile, is much more plausibly an African product. And while African potteries seem not to have tarried long in producing local versions of imported shapes (Salomonson 1968), Deneauve IV is not one of those which is known to have been locally made.

Alternatively, there is the later (175 - 250 CE: Bonifay 2004: 337 [B15=Deneauve XA]) series of African "triangular-nozzled" lamps (cf. esp. Deneauve 1969: n. 1035, 1036), with which the present example may be compared in respect of its fabric and, typologically speaking, the summary treatment of the volutes flanking the nozzle. Such lamps are, however, typically much larger than the present example, and in lieu of the airhole observed here, display a variety of molded motifs at the junction of nozzle and shoulder.

11. **GE3018:** Frag. of the shoulder of an ARS lamp, type *Atl.* VIII (cf. variant C2c and d).

*Context.* GCU -2, -4 (Genna).

*Description.* GPD 3cm. Fragment of the shoulder and a little of the discus of an *Atl.* (194ff.) type VIII C2c lamp. The shoulder is flat and decorated with a course of

impressed ovolos, of which only one is mostly preserved. The boundary between the shoulder and the discus, the preserved portion of which is undecorated, is marked only by a faint carination. Coarse, granular pinkish (10R 5/8 - 6/8) fabric in which several large rounded grains of quartz, alongside smaller particles of lime and a few vacuoles, may be seen. Very little of the thin, matte slip is preserved.

*Chronology.* Grosso modo, lamps of form VIII may be dated to the fifth century CE; fine distinction between the various types remains difficult more than twenty years after the type was described. The present example is perhaps to be associated with the C2c variants, of which is characteristic the variety of shoulder decoration described above (Bonifay 2004: 366-368). The type is known to have been manufactured at El-Mahrine (Mackensen 1993a: 114-117), the products of which, produced in Carandini's D1 (*Atl.* 78) ware, may be compared with the present example in respect of their fabric and slip.

12. **GE3048:** Frag. of the handle of an ARS lamp, type Hayes 1.

*Context.* GCU 5, -3 (Genna).

*Description.* P. H 1.8cm. Fragment of an ARS handle, more or less vertically oriented, with a triangular profile and a single groove in the spine. Small-grained orange (2.5YR 6/8) fabric with the remains of a reddish (10R 6/8 - 2.5YR 6/8) matte slip preserved on exterior surfaces.

*Chronology.* Fine typological distinction is impossible in the present case. Nevertheless, reference to Hayes' (*LRP* 310-314) bipartite typology can still be made. The present example is his type 1 (= *Atl.* VIII and IX, grosso modo), dated to the mid-fourth - fifth century CE.

13. **GE3019:** Frag. of the shoulder of an ARS lamp, type *Atl.* X.

*Context.* GCU -4, -1 (Genna).

*Description.* P. W shoulder 1.6cm, est. diam. c. 8.5cm. Frag of shoulder of an *Atl.* (198ff.) type X lamp. The shoulder is distinguished by a channel, only the outer edge of which is preserved, in which two appliqué reliefs, both indistinct, are set; one resembles, perhaps, and oak leaf. Fabric and slip, cf. **GE3018**.

*Chronology.* *Atl.* type X lamps are, as Bonifay (2004: 370) observes, the variety for which the documentation is most extensive. The variety on display, however, makes chronologically-meaningful distinction occasionally difficult, especially when faced with a piece as fragmentary as the present example. Under the circumstances, it is safest to make reference to Hayes' (*LRP* 310-314) more general bipartite chronology. His types 2A and B (= *Atl.* X) appear in the fifth century CE and are known during the sixth as well.

14. **GE3092:** Frag. of the handle of an ARS lamp, type Hayes 2.

*Context.* DU 1055 (Genna).

*Description.* GPD c. 2.6cm. Fragment of the handle and a little of the shoulder of a Hayes (*LRP* 310-315) type 2 ARS lamp. Plain, solid triangular handle projecting backward from its fragmentary point of junction with the body of the lamp, of which

only a small, undecorated part of the shoulder is preserved. Granular pinkish (10R 6/8) fabric with the remains of a pitted red (10R 5/8) slip.

*Chronology.* Fifth - sixth century CE (*LRP* 310-315).

15. **PI3044:** Frag. ring base of an ARS lamp. Illustrated (p. 306).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* GPD 3.7cm, diam. base c. 4.2cm. Granular orange (2.5YR 6/8) fabric with a smooth, semi-lustrous orange (2.5YR 5/8) slip.

*Chronology.* Ring bases like the present example are frequent on ARS lamps of third (cf. Bonifay 2004: Fig. 199: Atl. IV.1) through sixth century CE date (cf. e.g. Bonifay 2004: Fig. 216: 6, type *Atl.* X). It is impossible, in the absence of other defining features, to be more specific.

#### 5. Miscellaneous.

1. **GE3045:** Frag. of the rim of an ARS *vel sim.* vessel, type cf. (Ardizzone 1995: Fig. 21: 86/1064). Illustrated (p. 306).

*Context.* GCU 5, -3 (Genna).

*Description.* d Granular brownish (2.5YR 5/8) fabric with a thick, lustrous, well-smoothed red (10R 5/8) slip on the interior surface and exterior rim face. The underside of the rim is either unslipped or is only very thinly so, and bears prominent turning marks.

*Chronology.* Cf., for the form, Ardizzone (1995: Fig. 21: 86/1064), which the author dates to the fourth - fifth century CE (p. 90). 86/1064 is one of several shapes that appear to have been manufactured in a fabric (TS/34: Alaimo *et al.* 1995: 406) which, despite its similarities with African clays, analysis suggests may be local. The present example seems rather to be an African product, albeit one for which comparanda are not forthcoming.

APPENDIX 3. AMPHORA CATALOG<sup>956</sup>

## I. African amphorae.

1. *Tripolitanian types.*

1. **SL3069:** Frag. African amphora form Tripolitanian 2. Illustrated (p. 310).

*Context.* DU 1012 (grab find) (San Leonardo).

*Description.* Diam. 18-19 cm. Coarse reddish-orange fabric (2.5YR 6/6) in which frequent quartz and calcareous inclusions appear. The inside and outside surfaces are covered in a cream-colored slip.

*Chronology.* On the basis of dated finds from Tripolitanian contexts, the manufacture of Tripolitanian 2 containers appears to have spanned the years between the first half of the first–end of the fourth century CE. If, however, the finds from Ostia are any indication, the period of their exportation to (Peninsular) Italy is a little more circumscribed. There, they appear in contexts dated from the end of the first–middle of the third century CE. Inasmuch as the evolution of the form during this period has yet to be elucidated, we cannot be more precise than this (Bonifay 2004: 92).

2. **SL3109:** Frag. African amphora form Tripolitanian 3. Illustrated (p. 310).

*Context.* DU 2012, tract 1 (San Leonardo).

*Description.* Diam. 14 cm. Fragment of the rim of a Tripolitanian 3 (Panella 1973) amphora. Coarse grey fabric in which heterogeneously-sized granules of quartz and lime, as well as frequent small vacuoles, are visible. The interior and exterior surfaces of the vessel are much the same color as presented by the fabric in section.

*Chronology.* Second–second half of the third century CE at Ostia, but with more localised distribution in the fourth century AD (Panella, 1973; 2001).

2. *Hammamet types.*

1. **SL3070:** Frag. African amphora, cf. form Hammamet 1 D. Illustrated (p. 310).

*Context.* DU 2011, tract 1 (San Leonardo).

*Description.* Diam. 14 cm. Fragment of the rim and part of the neck of a Hammamet form 1 amphora, specifically of the "D" subtype defined by Bonifay (cf. 2004: Fig. 49:7).

*Chronology.* The present example is rather smaller than most examples of the breed, but otherwise morphologically compatible with Hammamet 1 D. These containers are dated to the second–beginning of the third century CE (Bonifay 2004: 93).

2. **GE3272:** Frag. African amphora form Hammamet 1 E or 2 A. Illustrated (p. 310).

*Context.* GCU 6, -2 (Genna).

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956. For a discussion of the catalogue format and conventional abbreviations, see the prefatory matter in Appendix 2.

*Description.* Diam. 17 cm. Compact orange fabric in which relatively frequent small quartz grains may be seen. The outside and inside surfaces, at least to the break, are covered in an even-toned yellow-white slip of variable density: it is thickest on the exterior and underside of the rounded rim member and thinnest inside the neck.

*Chronology.* In respect of its profile, the present example is very like the "A" variant of Hammamet 2, which is dated from sometime in the third–fourth century CE (Bonifay 2004: 93). Its diameter, however, is more typical of Hammamet 1 E, the containe type which, Bonifay hypothesizes, may have been its typological forebear. The latter shape, like all the variants of Hammamet 1, has a terminus near the beginning of the third century CE. If the present example is taken as transitional, a third century date is probably appropriate.

### 3. *Africana* 1.

1. **SL3108:** Frag. African amphora form *Africana* 1 C. Illustrated (p. 310).

*Context.* DU 2011, tract 4 (San Leonardo).

*Description.* Diam. 14 cm. Fragment of the rim and part of the neck of an *Africana* 1 C container. Coarse, granular orange fabric with frequent small rounded quartz inclusions and a scattering of medium-sized irregular calcareous impurities. There are no traces of a slip.

*Chronology.* Bonifay's (2004: 107) type *Africana* 1 C represents an expansion of the classic typology, which provided for "A" and "B" varieties, in recognition of the existence that certain of the latter sort in fact constituted a later (indeed, the ultimate) development of the type. They are dated from the second half of the third–fourth century CE.

### 4. *Keay* 25.

1. **MA3000:** African amphora form *Keay* 25.1. Illustrated (p. 311).

*Context.* DU 1083 (Marcanzotta).

*Description.* Diam. 11 cm. Fragment of the rim and part of the neck of a *Keay* (1984: 184–212) form 25.1 amphora. Hard, granular reddish fabric with a variety of small white and (less frequent) darker inclusions. The exterior surface, like the uppermost part of the interior, is an uneven brownish-purple. The lower part of the interior surface, meanwhile, is nude. Scanty remains of a horizontal white line may be seen at the break.

*Chronology.* Production of the twenty-nine variants of *Keay*'s form 25—which, for greater ease of use, are more typically subsumed under his subtypes 25.1 (variants A–C), 25.2 (E–I), and 25.3 (K–V)—seems, in general, to have been a phenomenon of the fourth century (Bonifay 2004: 122). Such a date, in any event, is compatible with the present example, which bears comparison with *Keay*'s variant B (cf. 1984: Fig. 77:2; ). This identification is rendered more persuasive by the existence of an important production of *Keay* 25.1 containers by the workshop at Sidi Zahrani-Beni Khiar, the fabric of which (Bonifay 2004: 37) is very like that of the present example.

### 5. *Spatheia*.

1. **GE3287**: Frag. type 1 A or B Spatheion rim. Illustrated (p. 311).

*Context*. GCU 1, -7 (Genna).

*Description*. Diam. 11 cm. Fragment of the rim of a type 1 Spatheion, likely of either the "A" or "B" subtypes identified by Bonifay (2004: 125). Pinkish-orange (2.5YR 6/8) fabric, the texture and composition of which, cf. **DB3000**. The outside surface bears the remains of a khaki-colored (7.5YR 8/2–8/4) slip.

*Chronology*. First half–middle of the fifth century CE (Bonifay 2004: 125).

2. **SL3103**: Frag. Type 1 C Spatheion. Illustrated (p. 311).

*Context*. DU 2011 (grab find) (San Leonardo).

*Description*. Diam. 10 cm. Hard, sandy orange fabric in which a variety of inclusions may be seen, the latter comprising, besides the characteristic African limestone and rounded quartz, a variety of irregular red and dark brown impurities. The exterior surface and the uppermost part of the rim bear a relatively thick, albeit slightly mottled, yellow-white slip. The interior is nude.

*Chronology*. First half–middle of the fifth century CE (Bonifay 2004: 125).

3. **PI3071**: Frag. type 1 D Spatheion. Illustrated (p. 311).

*Context*. DU 2205, tract 1 (Piscitello).

*Description*. Diam. 8 cm. Small-grained brownish-orange fabric in which a variety of infrequent, mostly small quartz and calcareous inclusions appear, alongside the odd larger red or brown impurity. The inside and outside surfaces are covered in an even yellow-white slip.

*Chronology*. First half–middle of the fifth century CE (Bonifay 2004: 125).

4. **SL3102**: Frag. Spatheion, variant type. Illustrated (p. 311).

*Context*. DU 2012, tract 1 (San Leonardo).

*Description*. Diam. c. 9.5 cm. Rough, granular pinkish-orange (10R 6/8–2.5YR 6/8) fabric, the core of which, viewed in section, approaches a grey-brown. Very frequent small calcareous inclusions and microfossils—some of the latter of which have exploded, producing a constellation of tiny vacuoles—are visible throughout. The exterior surface bears scanty remains of a pale yellowish (10YR 8/3–8/4) slip.

*Chronology*. In view of the diameter of its rim—which, at less than 10 cm, is too small to support an identification with the otherwise-morphologically-similar Keay 62 Q (Avg. rim diameter, 14.6 cm: Keay 1984: 334)—the present example should probably be classified as a Spatheion. It is not, however, one which can be easily assimilated to any of the most frequent types. The shape of the rim is most similar to that of types 3 B or C—both seventh century containers (Bonifay 2004: 127–129)—but these vessels were, in the main, a great deal smaller. The present example is more nearly of a size with the earlier type 1 and 2 Spatheia, which have a combined chronology of the fifth–sixth centuries CE. Situating the present example within this period of time is difficult, but the likelihood is that it is earlier rather than later: in general, the

evolution of these several classes of small amphorae was toward ever more modest dimensions. As such, a late fifth or sixth century date is probably appropriate.

#### 6. Keay 35.

1. **CA3017**: Frag. African amphora form Keay 35 A. Illustrated (p. 311).

*Context.* DU 2140, tract 5 (Casa Abbadessa).

*Description.* Diam. 15 cm. Fine-grained, sandy reddish-orange (2.5 YR 6/7) fabric in which frequent small white, red, and brown inclusions appear, alongside a scattering of larger rounded quartz granules. The exterior surface and upper part of the lip are covered in a light yellowish-brown (10YR 7/6) slip.

*Chronology.* In respect of both fabric, which is consistent with that employed by the workshop at Sidi Zahrani (cf. i.a. 2012, t1, 9), and form, the present example is consistent with descriptions of Keay's (1984: 234) form 35 A, which is dated to the fifth century CE (Bonifay 2004: 135).

2. **GE3096**: Frag. African amphora form Keay 35 B, small model. Illustrated (p. 312).

*Context.* DU 1055 (Genna).

*Description.* Diam. 9 cm. Fabric, cf. **CA3017**, than which the present example is a deeper red (10R 4.5/8). The yellow-white uppermost layer of the salt glaze seen in that piece is here absent, leaving visible the grey (2.5Y 6/1 circa) surface below.

*Chronology.* First half–middle part of the fifth century CE (Bonifay 2004: 125).

#### 7. Keay 57.

1. **DB3000**: Frag. African amphora form Keay 57. Illustrated (p. 312).

*Context.* GCU 018 (Ditta Barbagallo).

*Description.* Diam. 11 cm. Fragment of the rim and part of the neck of a Keay (1984: 298-299) form 57 amphora. Hard, relatively fine-grained reddish-orange (2.5YR 6/8) fabric in which a relatively limited amount of (predominantly small) limestone and rounded quartz inclusions may be seen. The exterior surface bears the remains of what either was, or has since become, a thin yellowish (7.5YR 7/4–7/6) slip. Just below the rim, on the exterior surface of the neck, a series of close-set, horizontal linear impressions are visible.

*Chronology.* The presence of combed decoration on the neck, as described above, is a characteristic feature of Keay forms 55, 56, and 57, all of which were manufactured at the workshop at Sidi Zahrani-Beni Khair in the area of modern Nabeul (Ghalia *et al.* 2005). The present example bears comparison with both of the latter two forms (cf. Keay 1984: Fig. 127:5), but the thickness of the rim, and the marked convexity of its outer face, are more typical of Keay 57 vessels. On the basis of evidence to date, the production of Keay 57 began sometime during the second half of the fifth century. The manufacture of Keay 56, meanwhile, can probably be dated to the end of the fifth century. Dispositive information regarding their respective terminus is lacking, but it is likely that both forms were discontinued sometime in the sixth or, in the case

of the Keay 57, perhaps seventh century (Keay 1998). Their contents are unknown, but olive oil has been raised as a possibility.

8. *Keay 62 Q/R.*

1. **PI3067:** Frag. African amphora form Keay 62 Q. Illustrated (p. 312).

*Context.* DU 2205, tract 2 (Piscitello).

*Description.* Diam. 13 cm. Fragment of the rim and part of the neck of a Keay (1984: 309-350) form 62 Q amphora. Rough, sandy orange-red (2.5YR 5/8) fabric in which some calcareous and frequent aeolian quartz inclusions are visible. Scanty remains of the original cream-colored salt glaze adhere to the exterior rim face.

*Chronology.* Per Bonifay (2004: 137), subtypes Q and R of Keay's form 62 (1984: 334) actually constitute a morphologically distinct, and perhaps relatively early, form. Their place of manufacture—which, on petrological grounds, must lie within the area of modern Tunisia—cannot, at present, be more specifically delimited. The extent of their diffusion, meanwhile, is not in doubt. Exemplars are frequent in western Mediterranean contexts between the last third of the fifth–first half of the sixth century CE. Their contents are unknown.

9. *Keay 62 A/B/D/E.*

1. **GE3239:** Frag. African amphora form Keay 62 A.

*Context.* GCU 3, -1 (Genna).

*Description.* Diam. 13 cm. Sandy orange fabric in which a variety of primarily small white, red, and brown impurities are visible, notable among them frequent rounded quartz grains and a scattering of much larger limestone fragments. The outside surface, like the upper rim face, is covered in a yellow-white slip, the tone of which is notably varied. On the exterior, cool tones predominate—the lowest preserved portion is almost grey—while the slip on the upper rim face is warmer in tone.

*Chronology.* First half of the sixth century CE (Bonifay 2004: 140).

2. **GE3256:** Frag. African amphora form Keay 62 A or D. Illustrated (p. 312).

*Context.* GCU -2, -2 (Genna).

*Description.* Diam. 12-13 cm. Compact orange fabric in which scattered large calcareous inclusions and small vacuoles are notable. The outside surface, as well as the preserved portions of the rim's upper aspect, are covered in an opaque pale yellow slip.

*Chronology.* Grosso modo, the shape of the present example bears comparison with form Keay 62 A, which, per Bonifay (2004: 140), is dated to the first half of the sixth century CE. Certain features, however—in specific, the presence of a relatively well-defined ledge inside the neck, and the constriction of the latter at a relatively short distance below the rim—the present example also bears comparison with Keay 62 D, which is thought to be later. As such, a chronology around the middle of the sixth century CE is probably reasonable.



3. **GE3240:** Frag. African amphora form 62 E or 61 B.

*Context.* GCU 3, -1 (Genna).

*Description.* Diam. 14 cm. Fragment of the rim and part of the neck of what is either a Keay 62 E or 61 B amphora. Compact orange-tan fabric in which numerous large, yellow-white inclusions may be seen; the largest of these erupts from the exterior rim face. The outside surface of the neck, and to a lesser extent the rim, bear the remains of a thin, yellowish slip.

*Chronology.* Owing to the degree of its fragmentation, it is difficult to ascertain whether the present example is better classified as a Keay 62 E or 61 B container. Happily, however, the distinction is not an overwhelmingly important one. While it is likely that, in typological terms, the former is antecedent to the latter, their respective chronologies overlap substantially. Grosso modo, both are products of the period between the end of the sixth–first half of the seventh century CE. Moreover, both appear to have been manufactured by the same workshops, at Leptiminus and Moknine on the Tunisian coast, which employed clays very much like that of the present example.

4. **GE3244:** Frag. African amphora rim, cf. forms Keay 62 E and 61 D. Illustrated (p. 312).

*Context.* GCU -2, -4 (Genna).

*Description.* Diam. c. 15 cm. Fragment of the rim and part of the neck of a Keay (1984: 303-309) form 61 D or, more likely, 62 E amphora.

*Chronology.* In view of the typological similarities between Keay 62 E and 61 D, as well as the fragmentation of the present example—which, significantly, is fractured in the area of the undercut below the rim, the profile of which would be dispositive—both forms must be mooted as possible identifications. Happily, however, the distinction is not an overwhelmingly important one; their respective chronologies are functionally identical, and encompass the period between the end of the sixth–first half of the seventh century CE (Bonifay 2004: 140-141).

5. **GE3247:** Frag. Keay 62 base.

*Context.* DU 1054 (Genna).

*Description.* p. H 7.4 cm. Fragment of the base of what is probably a Keay 61 or, more likely, 62 container. This solid lower terminus of an amphora consists in two segments, the profile of which, seen together, resembles an inverted ziggurat. The boundary between them is delimited by a "step" produced by an abrupt reduction in the sherd's diameter (c. 4.5 cm, here), which otherwise diminishes gradually from top to bottom. A shallow depression in the upper surface of the fragment corresponds to the internal cavity of the vessel to which it pertained; the base is otherwise solid. Rough, sandy red fabric, the outer surface of which is pocked with vacuoles of varying size.

*Chronology.* The present example bears comparison with published examples of bases belonging, per Keay's typology, to both 61 (cf. Keay 1984: Fig. 134:8-9) and 62 (cf. Fig. 158:8, 62 A; Fig. 162:10, 62 E) series containers, the chronology of which

encompasses the sixth–seventh centuries CE. Finds since Keay's definition of the type, however, have tended to suggest that a firmer distinction can be made. As Bonifay (2004: 140) notes, Keay 61 amphorae are "généralement munis d'un pivot axial qui dépasse à l'intérieur, caractère qui ne se remarque pas sur les Keay 62". The present example, which lacks this sort of internal projection, should probably be associated with the 62 series. If we include the earliest subtype thereof, the 62 Q, then a chronology of the last third of the fifth–end of the sixth century CE is probably reasonable.

#### 10. Keay 61 C.

1. **GE3288**: Frag. African amphora form Keay 61 C. Illustrated (p. 312).

*Context.* GCU -1, -6 (Genna).

*Description.* Diam. 15-16 cm. Compact brownish-orange (2.5YR 5/6) fabric in which well-spaced, medium-sized yellow-white inclusions appear. The interior and exterior surfaces, where preserved, are notably smooth. The outside bears the remains of a bright yellow (2.5YR 8/3–5Y 8/3) slip.

*Chronology.* End sixth–first half of the seventh century CE (Bonifay 2004: 140).

2. **GE3267**: Frag. Keay 61 C rim. Illustrated (p. 313).

*Context.* GCU 1, -1 (Genna).

*Description.* Diam. c. 14 cm. Fabric and slip, cf. **GE3288**, from which the present example differs on account of a greater number of large calcareous inclusions in the matrix, as well as the presence of an irregular groove on the exterior rim face.

*Chronology.* End sixth–first half of the seventh century CE (Bonifay 2004: 140).

3. **GE3227**: Frag. Keay 61C rim. Illustrated (p. 313).

*Context.* GCU 3, -8 (grab find) (Genna).

*Description.* Diam. 14 cm. Fabric and slip, cf. **GE3288**, from which the present example differs by virtue of its lighter, more uniformly orange fabric. A single horizontal groove appears on the neck exterior just above the break.

*Chronology.* End sixth–first half of the seventh century CE (Bonifay 2004: 140).

#### 11. Keay 61 A/B/D/E.

1. **GE3274**: Frag. Keay 61 D rim.

*Context.* GCU 5, -1 (Genna).

*Description.* Diam. 13 cm.

*Chronology.* End of the sixth–first half of the seventh century CE (Bonifay 2004: 140).

#### 12. Keay 34.

1. **GE3281**: Frag. African amphora form Keay 34. Illustrated (p. 313).

*Context.* GCU -4, -7 (Genna).

*Description.* Diam. 15-16 cm. Fragment of the rim and part of the neck of a Keay (1984: 231-233) form 34 amphora. Compact brick-red fabric in which frequent small yellow-white vacuoles are notable.

*Chronology.* On the basis of their first appearance at Rougga, where it seems these containers were produced, the chronology of Keay 34 encompasses the first half sixth–seventh centuries CE (Bonifay 2004: 143). Elsewhere, however—including at Giarranauti (Basile 1996), in the southeast of Sicily—their appearance is more frequently, if not exclusively, a phenomenon of the seventh century.

### 13. *Multiple comparanda.*

1. **SL3081:** Frag. African amphora base, cf. forms Africana 2 and Keay 25.1.

*Context.* DU 2017 (San Leonardo).

*Description.* p. H 7.7 cm. Fragment of the base of an African amphora. Solid, relatively stubby spike, the diameter of which narrows from top to bottom, albeit not smoothly. Two points of articulation are notable. The upper (diam. c. 6 cm), which is located at about two-thirds p. H, marks a point at which the diameter begins to diminish more rapidly, while the lower, which is located c. 1.5 cm above the vessel's lowest point, marks a point at which the diameter no longer changes. The portion of the base below this forming a cylindrical knob, the inferior aspect of which is gently rounded. Compact orange-red fabric in which a scattering of large calcareous inclusions are notable.

*Chronology.* Insofar as it is preserved, the profile of the present example bears comparison with the bases of both Africana 2 and its successor, Keay 25.1. The several variants of the former date from the end of the second–fourth century, while the latter is, at the earliest, a product of the third, and more typically the fourth.

2. **PI3070:** Frag. African amphora rim, cf. forms Keay 25 or 27 A. Illustrated (p. 313).

*Context.* DU 2205, tract 1 (Piscitello).

*Description.* Diam. 12 cm. Granular reddish-orange fabric in which frequent yellow-white inclusions appear, some of which are quite large; one of the latter erupts through the inside surface. Both surfaces are slipped, the inside in a yellow-white which is most vivid at the lip and which fades to a matte khaki at the break. A similar khaki tone characterizes the exterior slip, which, however, is much more thickly applied: numerous brushstrokes are visible therein.

*Chronology.* Notwithstanding its notably thick slip, which is atypical of virtually the whole range of Roman African amphorae, the present example bears comparison with both Keay 25.1 and 27A amphorae. Certain of its features—notably, the lack of any visible division between the neck and the outer rim face, which follow a continuous line to the vessel lip, and the height of the upper handle attachment—are more characteristic of Keay 27 A containers. These last, however, seem to have only infrequently traveled beyond Tunisia, whereas Keay 25 is one of the best-distributed African amphorae in the western Mediterranean. The distinction, in either event, is of limited chronological significance; both shapes belong to the fourth century (Bonifay 2004: 122, 132).

3. **PI3080:** Frag. African amphora base, cf. forms Keay 25.2 or type 1 Spatheion. Illustrated (p. 313).

*Context.* DU 2206 (grab find) (Piscitello).

*Description.* p. H 7.3 cm. Fragment of the base of a Keay25.2 or type 1 Spatheion. Sandy brick red (towards 10R 5/8) fabric with a mottled tan slip on preserved exterior surfaces and underneath; color, cf. **CA3017**.

*Chronology.* Lengthy solid lower terminus of the sort illustrated here are characteristic of both Keay 25.2 and its smaller successor, the type 1 Spatheion. The chronology of the two forms is continuous, and encompasses the somewhat more than fifty years between the end of the fourth–middle part of the fifth century.

4. **GE3252:** Frag. African amphora rim, cf. forms Keay 62 E and 61 B.

*Context.* GCU -4, -4 (Genna).

*Description.* Diam. 14-15 cm. The rim comprises a heavy everted member, which, when seen in section, has a rounded interior face and a flat or slightly concave exterior face. The juncture of the exterior rim face and the vessel neck, which is preserved to a height of no more than 1 cm, is marked by a gentle undercut.

*Chronology.* Rims of the sort described above are characteristic, grosso modo, of both Keay 62 E and 61 B containers. Failing any more of the neck, or indeed any other diagnostic feature of the vessel in question, it is difficult to adjudicate between the possibilities mooted. In any event, the chronology of Keay 62 E and 61 B is virtually identical. Both appear near the end of the sixth century and persist through, perhaps, the first half of the seventh.

5. **CA3016:** Frag. African amphora rim, cf. forms Keay 62 A or D and 61 A. Illustrated (p. 313).

*Context.* DU 2139, tract 3 (Casa Abbadessa).

*Description.* Diam. c. 13 cm. Sandy pinkish-orange fabric in which a handful of very large (2-3 mm) irregular yellow-white inclusions are visible; one such erupts through the surface of the exterior rim face. The outside surface bears a khaki-colored slip which extends to just beyond the upper surface of the rim.

*Chronology.* Owing to its lamentable state of preservation, it is difficult to identify the present example very precisely. The shape as well as the diameter of the rim are perhaps most similar to those of Keay 61 A (cf. esp. Keay 1984: Fig. 132:1, diam. regularly 13-14 cm), but the gently convex lower outside face is much more typical of the earlier 62 series. Here, too, plausible comparanda can be found, specifically with Keay 62 A (cf. Keay 1984: Fig. 138:1, 10; Teall 1959) and D (cf. Keay 1984: Fig. 146:7). The admission of so great a range of possibilities entails a commensurately broad chronology, encompassing, essentially, the latest phase of African amphora production tout court: sixth–seventh centuries.

6. **GE3229:** Frag. African amphora base. Illustrated (p. 314).

*Context.* GCU 5, -3 (Genna).

*Description.* p. H 6.1 cm; max. p. Diam. c. 6.7 cm. Fabric and slip, cf. PI3080.

*Chronology.* Insofar as it is preserved, bases this sort were characteristic of a wide range of African amphorae; indeed, it is difficult to exclude other than those which had a hollow (e.g. Tripolitanian 1) or especially short (e.g. Keay 36, 55-56) foot. That said, the fabric and salt-slip are more typical of fourth century and later containers than they are of the Africana 1 and 2 amphorae which preceded them. As such, a chronology of the fourth–seventh century is probably appropriate.

## II. Central Mediterranean amphorae.

### 1. Dressel 2-4.

1. **PI3068:** Frag. Dressel 2-4 handle.

*Context.* DU 2207, tract 1 (Piscitello).

*Description.* Coarse orange (2.5YR 6/7) fabric in which a multicolored variety of inclusions appear, prominent among them shiny black granules. The surface is covered in a cream-colored slip on three of its four sides; the fourth, which is nude, bears the scar left by the separation of this half of the handle from its twin.

*Chronology.* c. 70 BCE–third century CE, insofar as production was concerned. The widespread exportation of the type, however, was a phenomenon of the first century CE.

### 2. Mid Roman Amphora 1.

1. **GE3000:** Frag. Mid Roman Amphora 1 rim, variant A. Illustrated (p. 314).

*Context.* GCU 6, -3 (Genna).

*Description.* Diam. 6 cm. Hard, relatively well-levigated brownish (towards 2.5YR 5/8) fabric in which few inclusions may be seen; small scattered fragments of limestone are the only noteworthy exception. The exterior surface of the vessel is covered with a lighter yellowish (10YR 8/2–2.5Y 8/2) slip, extending to just inside the vessel lip.

*Chronology.* The sharply biconical profile of the vessel rim, the upper half of which inclines inward, is characteristic of the earlier "A" variant of Riley's Mid Roman Amphora 1, the origin of which remains in doubt. (Both North Africa and, more recently, Sicily have been proposed: Bonifay 2004: 148) On the strength of the evidence from Ostia (cf. Ostia II, n. 523: Carandini & Panella 1973), commerce in such containers may be as early as the latter half of the first century CE. It is during the second–fourth centuries CE, however, that they became most widespread in the Western Mediterranean. Their contents are unknown, but wine has frequently been assumed.

## III. Eastern amphorae.

### 1. Late Roman Amphora 1.

1. **GE3293:** Frag. Late Roman Amphora 1 rim. Illustrated (p. 314).

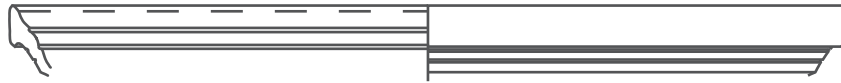
*Context.* GCU -2, -7 (Genna).

*Description.* Diam. 8-9 cm. Coarse, rough-surfaced brown (5YR 6/6) fabric in which frequent red and grey impurities may be seen. The cream-colored (7.5YR 8/4) slip, which covers the outside surface and the upper part of the area inside the neck, is thickly but unevenly applied. The juncture of the handle with the neck, which exhibits a multitude of marks left by the potter's fingers, is similarly irregular.

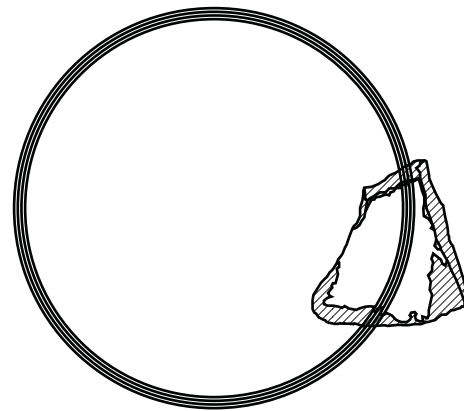
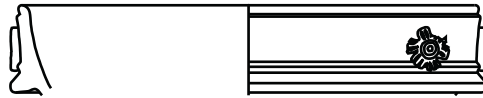
*Chronology.* Production of the several varieties of LRA 1 was an exceedingly long-lived phenomenon, spanning the period between the middle of the third–middle of the seventh centuries CE. It was not until the early part of the fifth century, however, that it began to be exported to the western Mediterranean. Its subsequent evolution, in typological terms, is thereafter well-documented. The present example, which is distinguished by a relatively narrow neck, may represent an example of the "smaller developed" model (cf. Williams 2005: Fig. 3) which was produced during the sixth and seventh centuries, but too little of the rim and handles are preserved to be entirely sure.

## APPENDIX 4. CERAMIC DRAWINGS

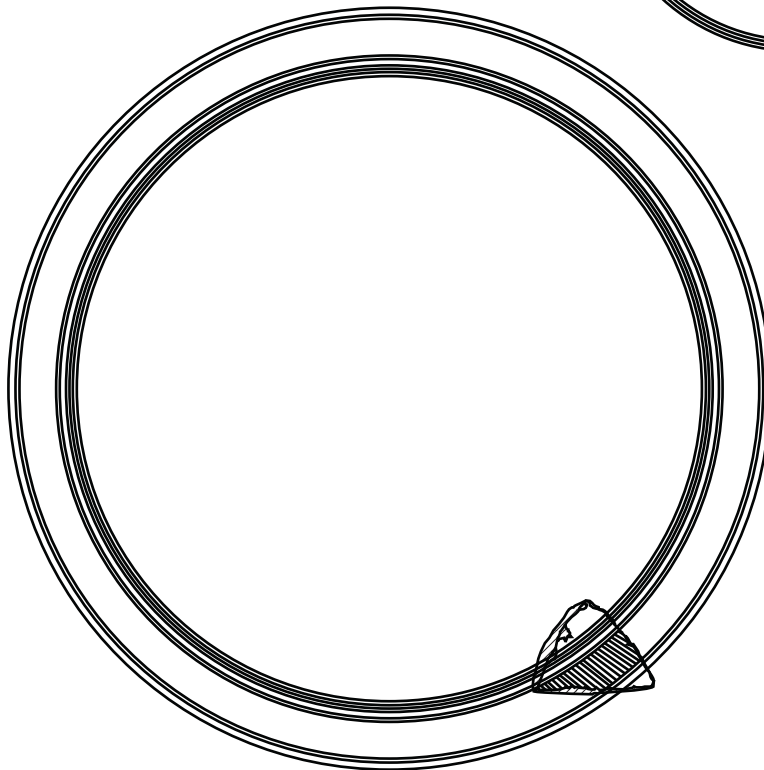
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SL3042  
SL DU 1012 grab



GE3067  
GE GCU 5, -1

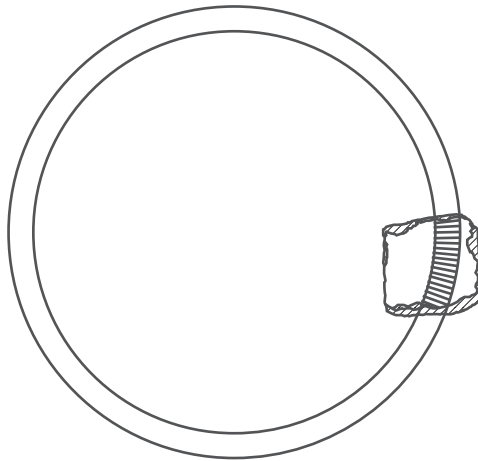


All images half scale

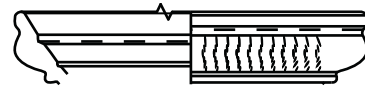
GE3066  
GE GCU 5, -1

All images half scale

DB3050  
DH GCU 002



SL3032  
SL DU 2016



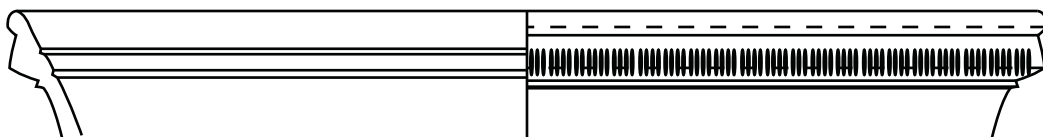
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GE GCU 4, -7



GE3004  
GE GCU 3, -7



SL3004  
SL DU 2011 grab



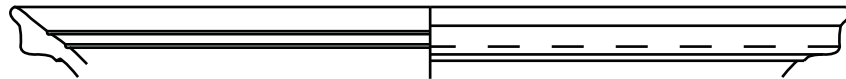
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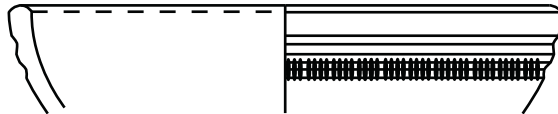
All images half scale



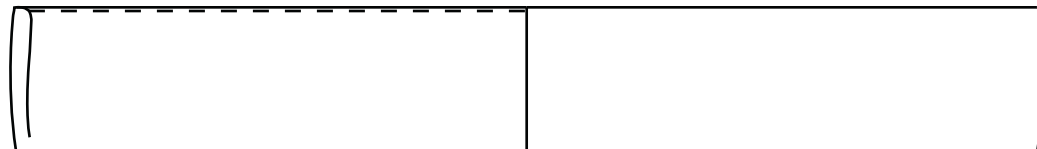
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SL DU 2012 tract 1

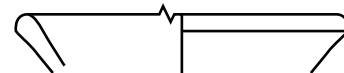


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GE GCU 3, -7



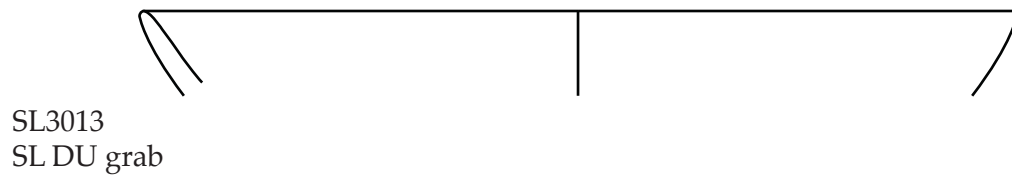
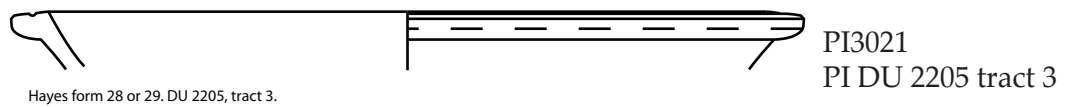
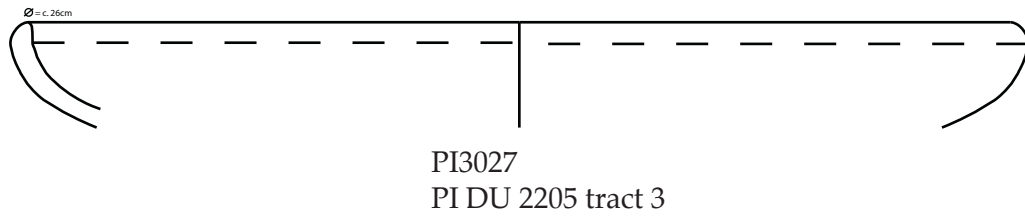
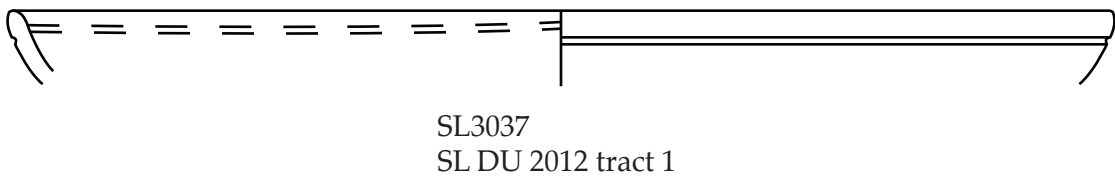
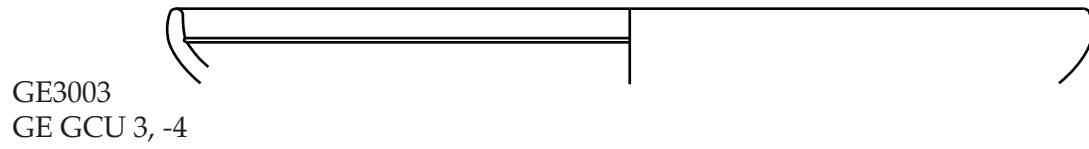
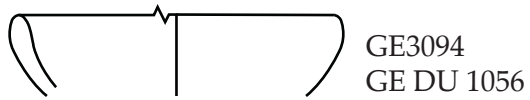
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GE GCU 3, -4 grab

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DB DU 2302 tract 2

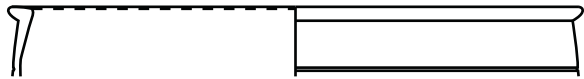


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PI DU 2205 tract 1

All images half scale



All images half scale



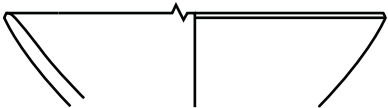
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PI DU 2206 tract 1

PI3017  
PI DU 2206 tract 1



GE3049  
GE GCU 5, -3

PI3035  
PI DU 2205 tract 1

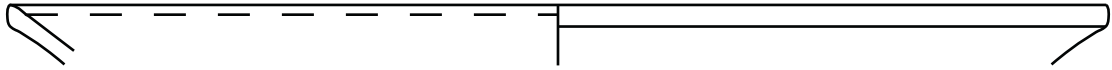


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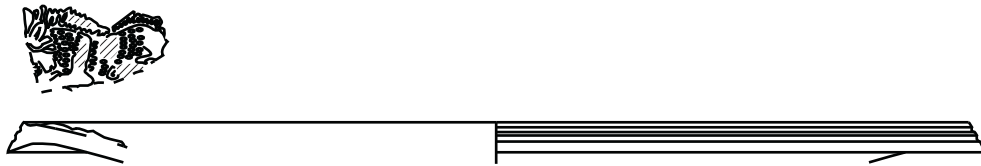
CA3008  
CA DU 2139 tract 5



All images half scale except where noted



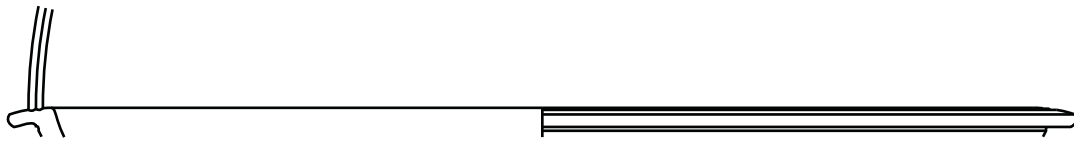
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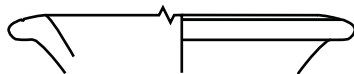
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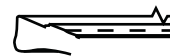
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Scale: 3:1



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SL DU 2010 tract 3



PI3014  
PI DU 2207 grab



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GE GCU 5, -1  
Orientation approximate

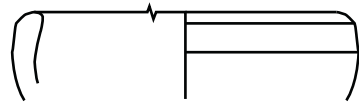
All images half scale



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PI DU 2206 grab



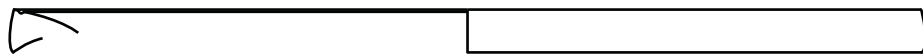
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CA DU 2135 tract 1



PI3029  
PI DU 2206 tract 3



SL3006  
SL DU 2011 tract 3



CA3002  
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PI3001  
PI DU 2206 grab

All images half scale



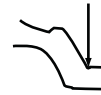
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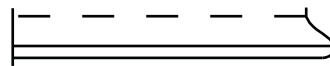
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GE GCU 3, -1



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PI DU 2206 grab



PI3019  
PI DU 2205 tract 3  
Diam. where indicated >45 cm

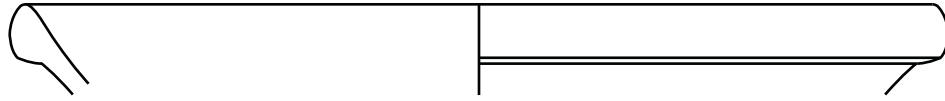


SL3011  
SL DU 2007  
Orientation approximate

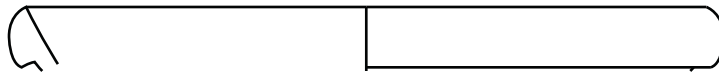


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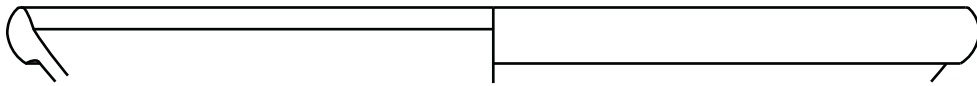
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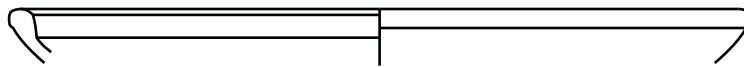
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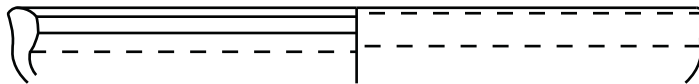
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SL DU 2011 tract 3



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SL DU 2010 tract 4

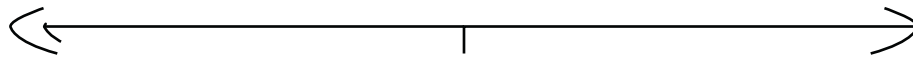


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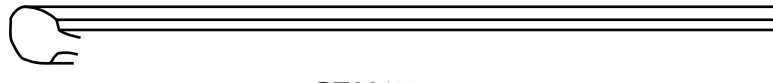


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GE GCU -4, -1

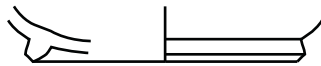
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PI3052  
PI DU 2207 grab



GE3017  
GE GCU -3, -5



DB3005  
DB DU 2303 tract



GE3044  
GE GCU 5, -3



SL3036  
SL DU 2012 tract 1



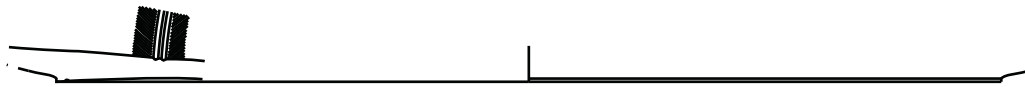
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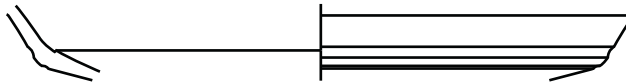
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All images half scale



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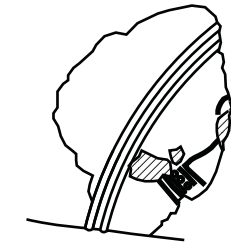
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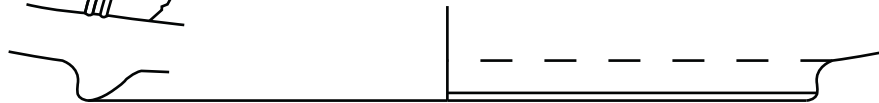
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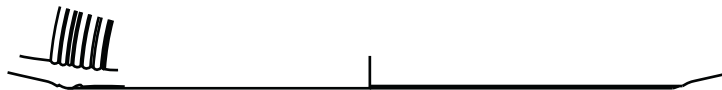
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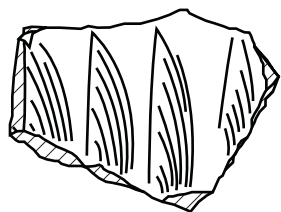
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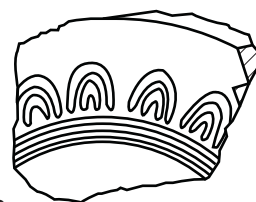
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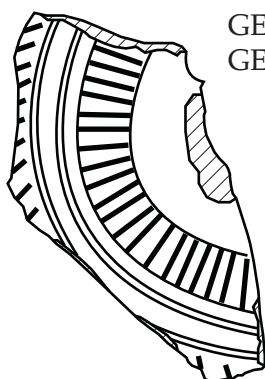
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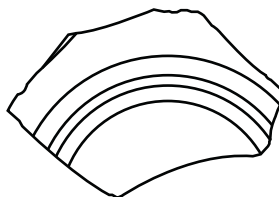
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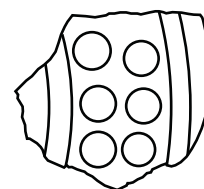
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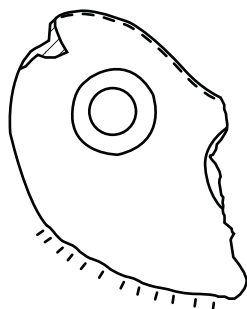
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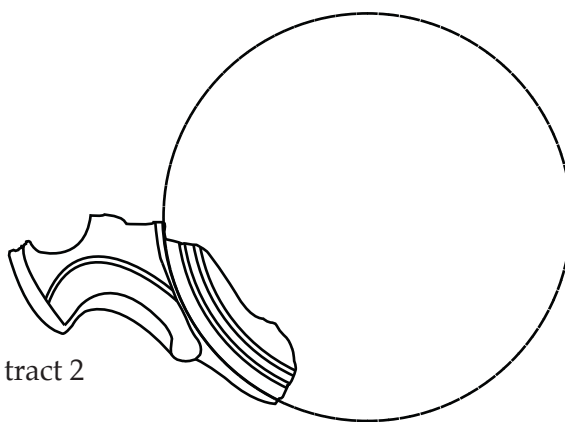
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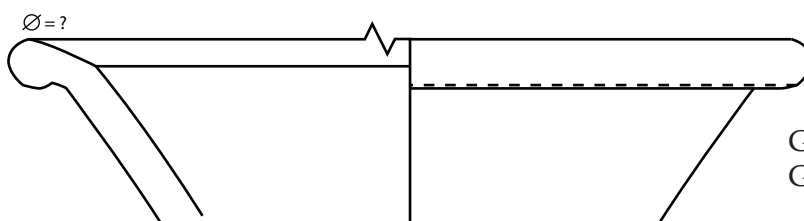
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PI DU 2206 tract 3



PI3042  
PI DU 2205 tract 1

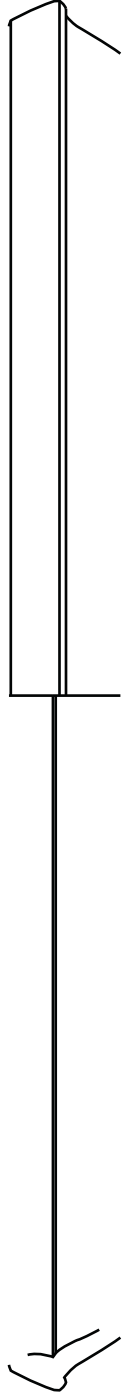


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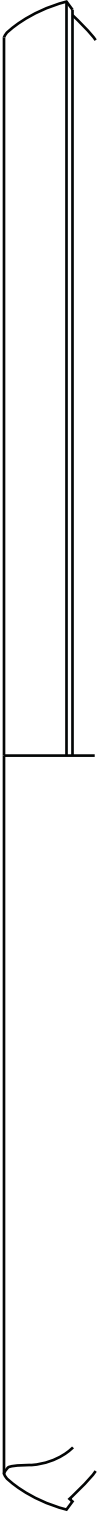


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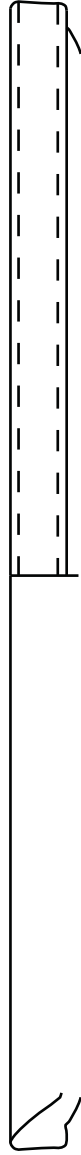
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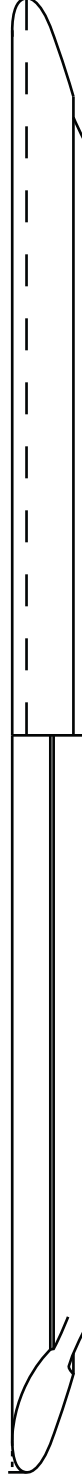
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GE3043  
GE GCU 5, -3



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PI DU 2211 grab

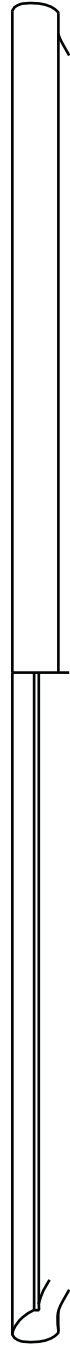


PI3036  
PI DU 2205 tract 1



SL3010  
SL DU 2011 tract 2

All images half scale



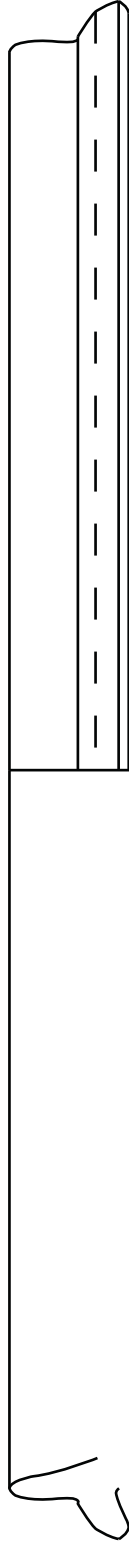
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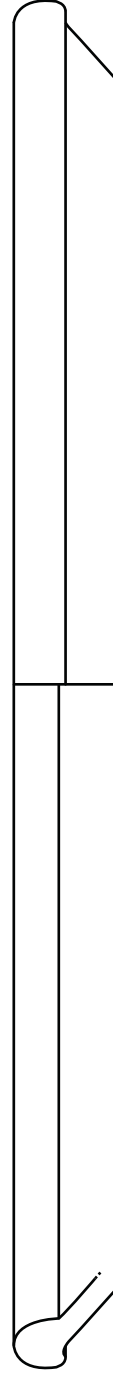
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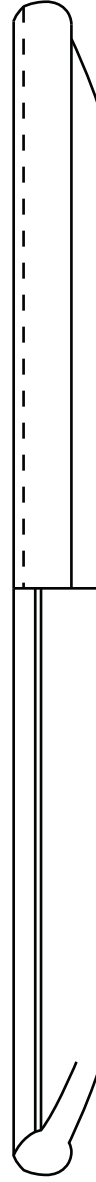
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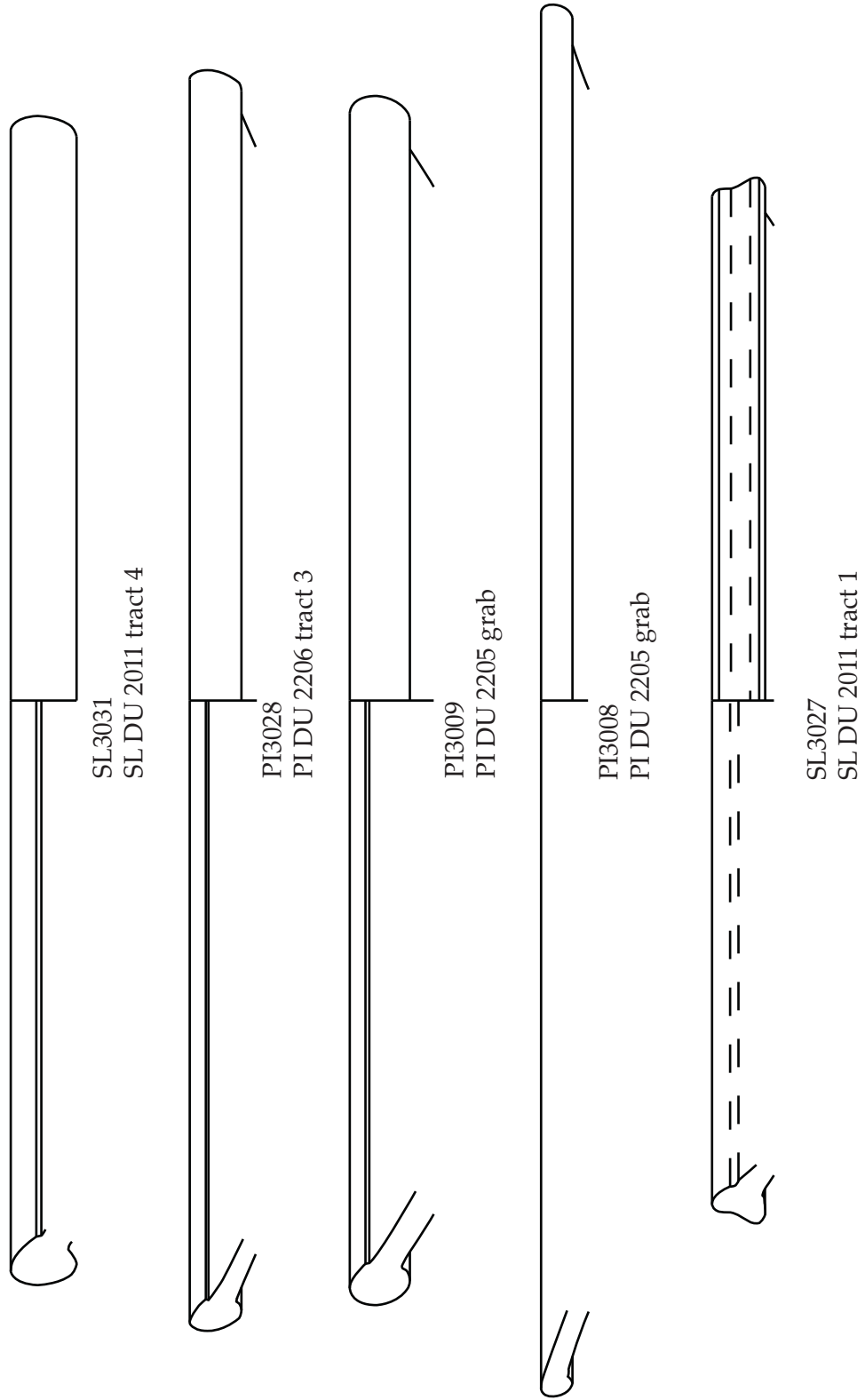
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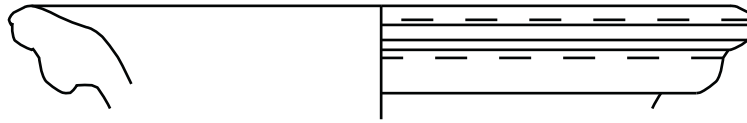
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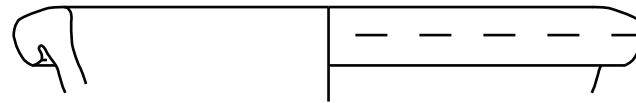
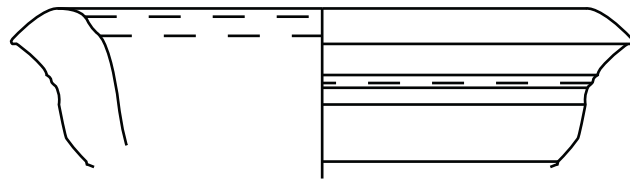


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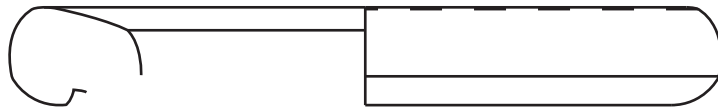
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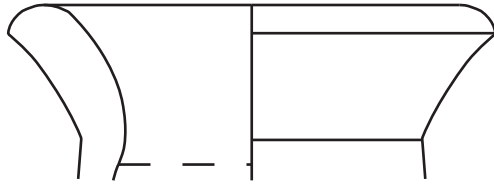
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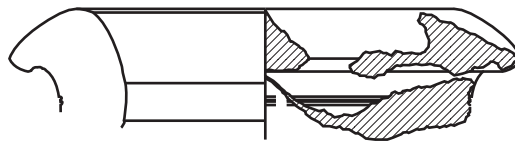
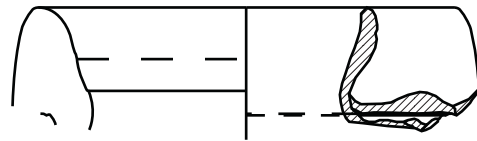
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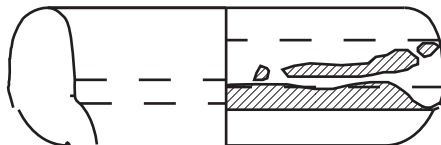
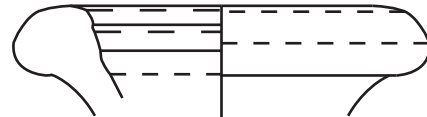
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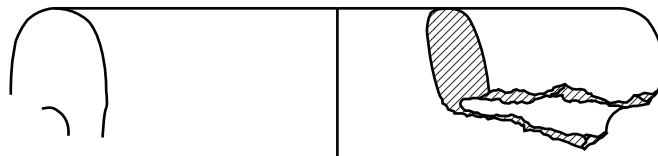
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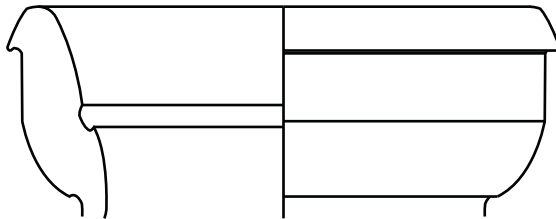
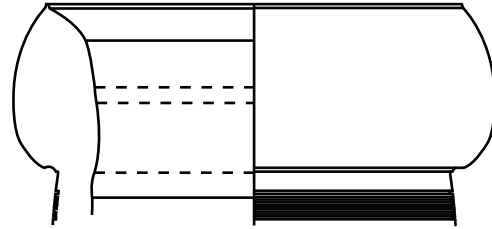


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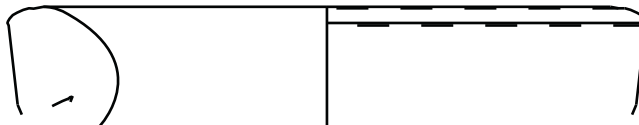
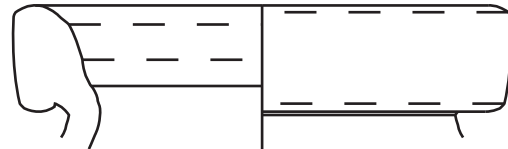
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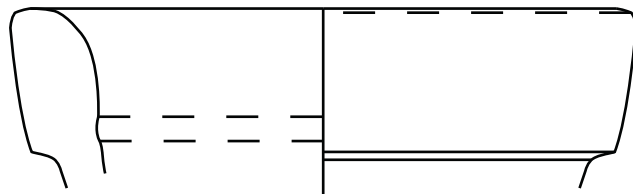
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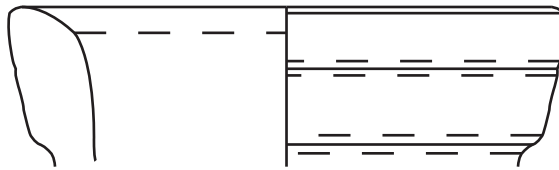
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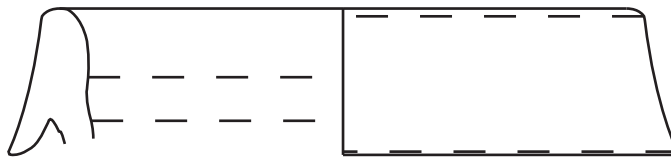
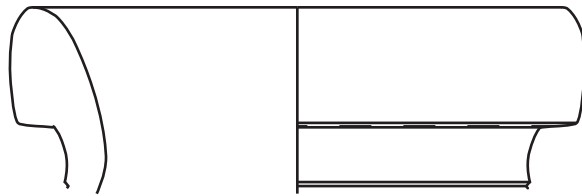


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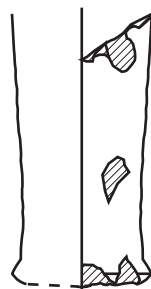
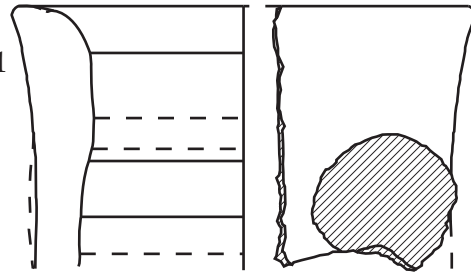
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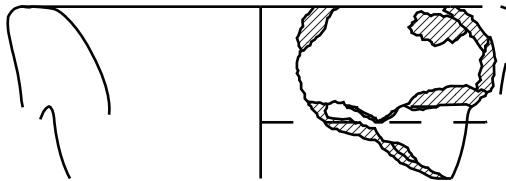


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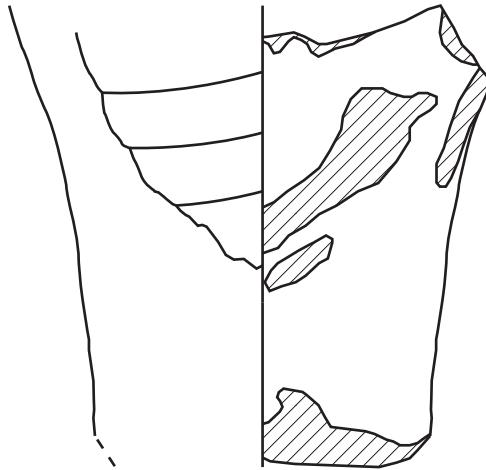
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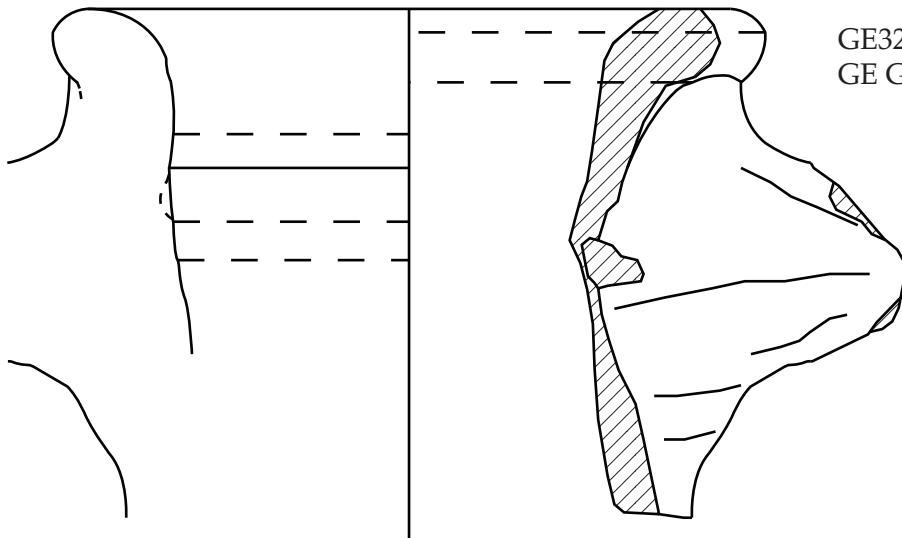
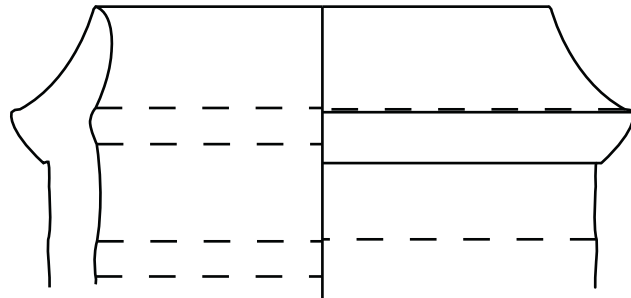


CA3016  
CA DU 2139 tract 3



GE3229  
GE GCU 5, -3

GE3000  
GE GCU 6, -3



GE3293  
GE GCU -2, -7

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Abbreviations are mostly those employed in Oxford Classical Dictionary. Exceptions are marked with an asterisk (thus: \*). Included in the following are literary texts as well as compilations and epigraphical corpora.

Amm. Marc. = Ammianus Marcellinus, *Rerum gestarum libri qui supersunt*, ed. (1978) Seyfarth, W. Leipzig: Teubner.

BAS\* = *Biblioteca arabo-sicula ossia raccolta di testi arabici che toccano la geografia, la storia, le biografie e la bibliografia della Sicilia*, ed. (1857) Amari, M. Lipsia: F.A. Brockhaus.

AppBAS 1\* = *Appendice alla Biblioteca arabo-sicula*, ed. (1875) Amari, M. Lipsia: F.A. Brockhaus.

AppBAS 2\* = *Seconda appendice alla Biblioteca arabo-sicula*, ed. (1887) Amari, M. Lipsia: F.A. Brockhaus.

BHG\* = *Bibliotheca Hagiographica Graeca*, 3rd ed., ed. (1957) Halkin, F. Subsidia Hagiographica 8a. Bruxelles: Société des Bollandistes.

BHL\* = *Bibliotheca Hagiographica Latina*, ed. (1898–1901) Société des Bollandistes. Subsidia Hagiographica 6. Bruxelles: Société des Bollandistes.

Cassiod. = Cassiodorus Senator

Var. = *Variae epistolae*, ed. (1894) Mommsen, T. in MGH AA 12. *Cassiodori Senatoris Variae*. Berlin: apud Weidmannos.

Chron. Pasch. = *Chronicon Paschale*. ed. (1832) Dindorf, L. in *Corpus scriptorum historiae Byzantinae* 11–12. Bonn: Impensis E. Weberi.

N.B. Contrary to standard practice, references to this text are to the page number(s) in this edition.

CIL = *Corpus Inscriptionum Latinarum*, ed. (1862–) Deutsche Akademie der Wissenschaften zu Berlin. Berolini: apud G. Reimerum.

CJus.\* = *Codex Iustinianus*, ed. (1892) Krueger, P. as *Corpus Iuris Civilis. Volumen secundum: Codex Iustinianus*. Berolini: apud Weidmannos.

CTh.\* = *Codex Theodosianus*, edd. (1905) Mommsen, T. P.M. Meyer, and P. Krueger as *Theodosiani libri XVI cum constitutionibus sirmondianis et leges novellae ad Theodosianum pertinentes*. Berolini: apud Weidmannos.

Dig. = *Digesta*, ed. (1872) Mommsen, T. in *Corpus Iuris Civilis. Volumen prius: Institutiones et Digesta*. Berolini: apud Weidmannos.

Expositio = *Expositio Totius Mundi et Gentium*, ed. (1966) Rougé, J. Paris: Éditions de Cerf.

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*IG* = *Inscriptiones Graecae*, ed. 1873–. Berlin: Reimer.

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*Joseph.* = Flavius Josephus

*BJ* = *De bello Judaico*, ed. (1997) Thackeray, H.St.J. Loeb Classical Library 487. Cambridge: Harvard University Press.

*Julian.* = Flavius Claudius Julianus Augustus Imperator

*Or.* = *Orationes*, ed. (1932–1964) Rochefort, G. in *L'empereur Julian: Oeuvres complètes*, vol. 1–2. Paris: Société d'édition "Les belles lettres".

*LP\** = *Liber pontificalis*, ed. (1955–1957) Duchesne, L. Bibliothèque des écoles françaises d'Athènes et de Rome, 2 sér., fasc. 3. Paris: E. de Boccard.

*LPR\** = Agnellus, *Liber Pontificalis Ecclesiae Ravennatis*, ed. (1878) Holder-Egger, O. in *MGH. Script. Lang.*, pp. 265–391.

*MGH* = *Monumenta Germaniae Historica*:

*AA* = *Auctores Antiquissimi* [13 vols.], ed. (1877–1898). Berolini: apud Weidmannos.

*Script. Lang.\** = *Scriptores rerum Langobardicarum et Italicarum saec. VI–IX* (1878). Hanover: Impensis Bibliopolii Hahniani.

*Nov.* = *Novellae constitutiones Iustiniani*, edd. (1895) Schoell, R. and W. Kroll in *Corpus Iuris Civilis. Volumen tertium: Novellae*. Berolini: apud Weidmannos.

*Pall. Gal.\** = Palladius of Galatia

*HL* = *Historia Lausiaca*, ed. (1904) Butler, C. as *The Lausiaca History of Palladius*, vol. 2: *The Greek text*. Texts and studies 4. Cambridge: Cambridge University Press.

*Paul. Diac.\** = Paulus Diaconus; Paul the Deacon

*Hist. Lang.* = *Historia Langobardorum*, edd. (1878) Bethmann, L.K. and G. Waitz in *MGH. Script. Lang.*, pp. 12–192.

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*P. Ital* 1, 2 = Tjäder, J.O. (1955–1982). *Die nichtliterarischen Papyri Italiens aus der Zeit 445–700*. Lund: C.W.K. Gleerup.

*PIR*<sup>2</sup> = *Prosopographia Imperii Romani saec. I. II. III.*, edd. (1933–) Groag, E., A. Stein, and L. Petersen. Berolini et Lipsiae: Apud Walter de Gruyter & Co.  
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Theoph. = Theophanes Confessor, *Chronographia*, ed. (1883–1885) de Boor, C. Lipsiae: Teubneri.

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